

# Junior Co-operative VARIETY TESTS 1953



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**Saskatchewan Wheat Pool**

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JUNIOR CO-OPERATIVE

# Variety Tests

WHEAT, BARLEY and FLAX

1953



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SASKATCHEWAN WHEAT POOL  
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## Foreword

**By the President of the Saskatchewan Wheat Pool**

*Higher than average production of cereals in the world during recent years has brought keener competition for available markets. In the face of this keener competition, quality becomes increasingly important. Western Canada's reputation for producing wheat of superior quality places it in a preferred position in the markets of the world.*

*This superior quality is due to a combination of suitable soil and climate, together with advanced scientific knowledge in the development of new varieties. To maintain this position, constant breeding and testing of new grain varieties are necessary for the improvement of quality, disease resistance and yielding ability.*

*The Saskatchewan Wheat Pool has assisted with this work through its program of Junior Co-operative Variety Tests conducted during the past nineteen years. This work has produced information of interest and value, both for the farmer and the scientific worker.*

*Among the highlights in 1953 were the results of tests with the new Selkirk variety, the only wheat available at present with resistance to stem rust race 15B. New varieties of barley and flax were also tested and some of these show promise for use on Saskatchewan farms.*

*This valuable project would not have been possible without the co-operation of a large number of young men and women who conducted individual tests on farms throughout the province. On behalf of the Saskatchewan Wheat Pool, I would like to express sincere thanks to each of these Junior Co-operators, and to wish them every success in their future activities.*

**J. H. WESSON.**

# Introduction

IN a hungry world the search for new and improved varieties of grain crops never ends. New varieties must be developed to meet changing conditions and to increase the yield from each cultivated acre. The extent of this development is illustrated by the fact that of the twenty-one varieties recommended by the Saskatchewan Cereal Variety Committee (now the Saskatchewan Advisory Council on Grain Crops) in 1938, only six are still recommended for 1954. Of the twenty varieties recommended ten years ago, only eight are still on the recommended list.

Before a new variety can be recommended, extensive testing must be carried on to determine its adaptability under different soil and climatic conditions. During the past 19 years the Saskatchewan Wheat Pool has taken part in this testing of new varieties on a scientifically-planned, province-wide scale.

During the 1953 season 309 tests were conducted with varieties of wheat, barley and flax. The tests were supervised by young farm men and women who were carefully selected for the work by the Wheat Pool delegate in each sub-district. Some of the young people were experienced test supervisors and others were conducting a project for the first time.

Assistance in planning the program and conducting the work was given by Dr. J. B. Harrington and his associates at the Field Husbandry Department of the University of Saskatchewan.

The following table shows the type of tests conducted and the number of each:

Project	No. of Individual Tests	Varieties Used
Wheat.....	174	Thatcher, Selkirk, S-250, Rescue, Chinook Lee and Nugget. (1)
Barley.....	101	Vantage, Husky, Harlan, Titan, Balder and Hannchen. (2)
Flax.....	34	Rocket, Redwood, Marine, Raja and CI-1155.

(1) Only five of the seven wheat varieties listed were used in each test. Thatcher, Selkirk and S-250 were included in tests throughout the entire province. Rescue and Chinook, both sawfly-resistant varieties, were used in the south, central and western Cereal Variety Zones (1A to 2E). They were replaced by Lee, a bearded bread wheat, and by Nugget, an early durum variety, in the eastern and northern zones (3A to 4B).

(2) Vantage and Husky were used in all tests. Harlan and Titan were included only in the south, central and western zones. They were replaced by Balder and Hannchen in the eastern and northern zones. (See Zone Map, page 41.)

The wheat, barley and flax projects were summarized for comparison on a yield per acre basis and several other important characteristics such as weight per measured bushel, height, straw strength, and days required to mature were also recorded. The results are given in detail for each individual test. However, a single test is not a satisfactory guide in the choice of a variety because of the variations in soil and climatic conditions which occur within a general area. For this reason, the average results are summarized for all tests conducted within each cereal variety zone, and this discussion provides a more adequate basis for comparing the different varieties.

The section of the booklet dealing exclusively with wheat tests begins on page 10.

The section of the booklet dealing exclusively with barley tests begins on page 45.

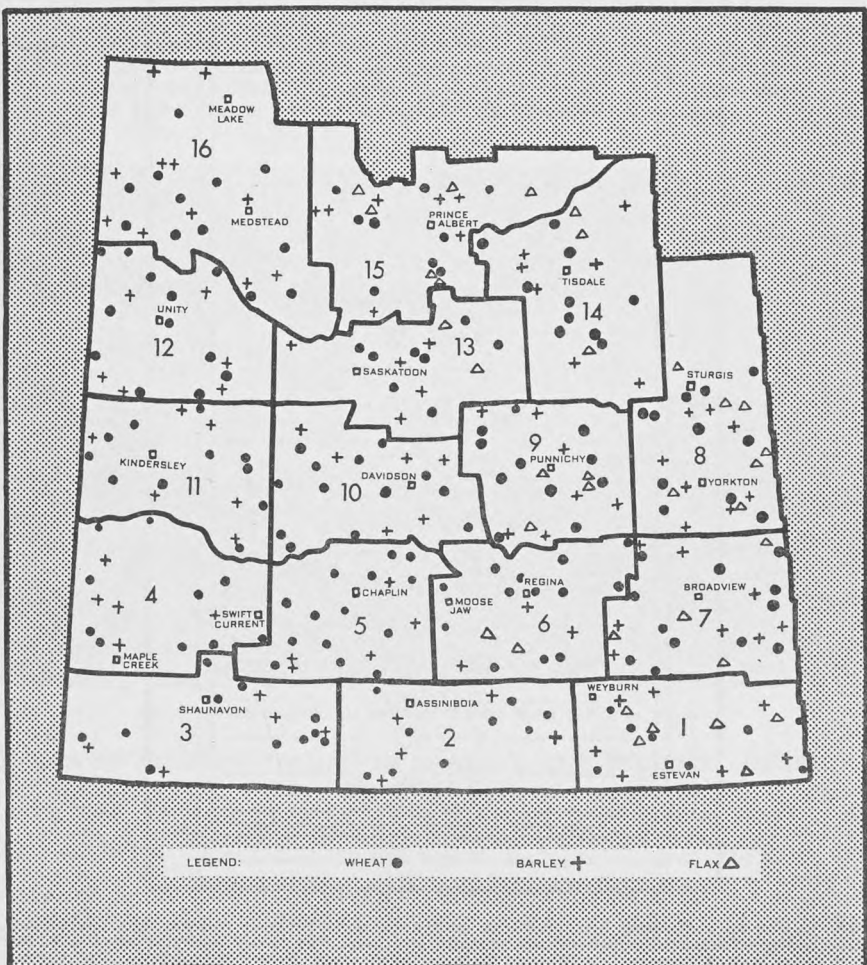
The section of the booklet dealing with flax tests begins on page 65. Flax tests were not conducted throughout the entire province, but were limited to Cereal Variety Zones 2A, 2E, 3A, 3B, 3C, 3D, 3F, 3J and 4A.

## DESCRIPTION OF TESTS

A diagram of the wheat test appears on page 6. Twenty rows were sown, allowing for four rows (replicates) of each variety. The rows were 16½ feet in length and were placed 18 inches apart. For protection purposes an extra buffer row was placed at each end of the test and the entire project was surrounded by a winter wheat border.

The barley tests and the flax tests were seeded in a similar manner. The barley test consisted of twenty plots of two rows each, allowing for five replicates of each of the four varieties. The flax test consisted of the same number of two-row plots, but there were five varieties and these were replicated four times throughout the test. One of the rows in each plot was used for testing purposes and the other provided protection and segregation for the test row. For additional protection the entire test was surrounded by a winter wheat border.

MAP SHOWING LOCATION OF TESTS ACCORDING TO WHEAT POOL DISTRICTS



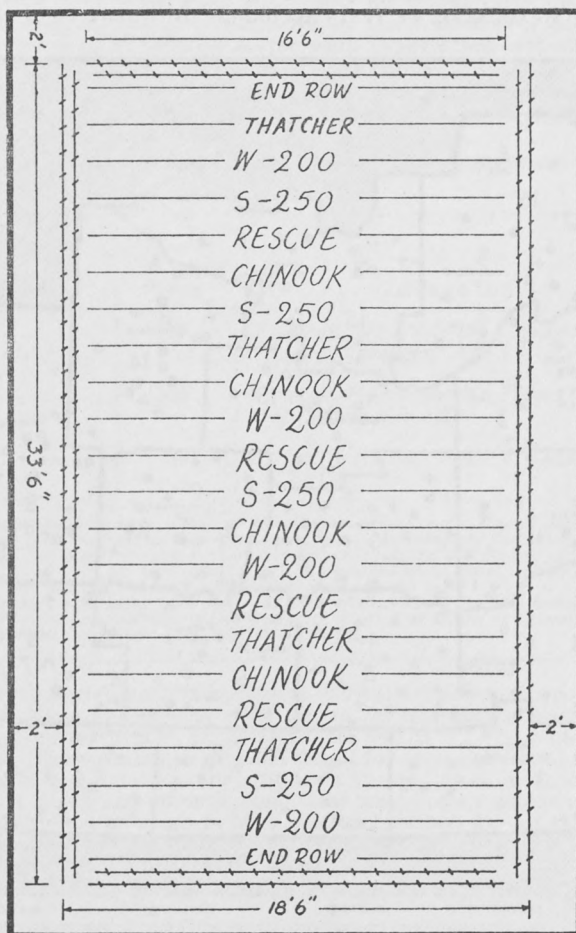


## ORGANIZATION OF THE TESTING PROGRAM

In order to determine the suitability of a variety for use in different parts of the province it is necessary to conduct tests under many different types of soil and climate. An attempt was made in 1953, therefore, to place two tests in each of the 166 Wheat Pool sub-districts of Saskatchewan. With few exceptions the desired distribution was achieved. This is illustrated in the map on page 5, which shows the location of each test.

As the success of the project was dependent upon the accuracy with which each test was carried out, it was necessary to choose as test supervisors a group of dependable young farm people who had a keen interest in this type of work. Selection of the supervisors in each sub-district was carried out by the Wheat Pool delegate for the area. The supervisors chosen were, in most cases, between the ages of sixteen and twenty-one years.

PLAN OF WHEAT TEST



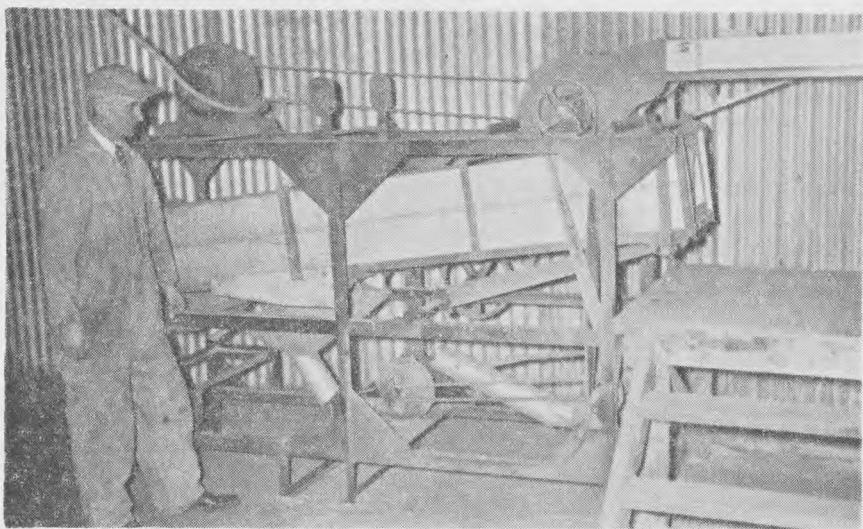
The crossed lines represent border rows of winter wheat. A two-foot pathway was left between the winter wheat border and the surrounding field crop. The barley and flax tests were laid out in a similar manner, except that 41 rows were sown. Five randomizations, or varietal arrangements, were used in seeding the tests. One of the five randomizations is shown in the above plan.

The equipment required for each test was supplied from Head Office of the Wheat Pool in Regina. Individual parcels of seed were carefully prepared and were shipped to the supervisors, together with full instructions explaining in detail the method of seeding the test. During the growing season, close contact was maintained between each of the 309 Junior Co-operators and the Junior Co-operative Department of the Wheat Pool organization.

The supervisors were requested to complete and forward regular progress reports concerning the comparative development of each variety. The information from these reports was summarized and was used as the basis for the results which appear in this booklet. When the grain was ripe, each co-operator carried out harvesting operations according to special instructions which had been supplied to him. Care was taken to ensure that the returns for each row were parcelled separately and were carefully marked in order to prevent errors in identification. The sheaves were dried and turned over to the nearest Pool Elevator agent for shipment to Head Office. On arrival at Regina, the sheaves were threshed separately and the yields were recorded. A sample of each variety was cleaned, weighed in pounds per measured bushel and graded.

Finally the yield, bushel weight and grade of each variety were entered on a summary sheet, together with the detailed information which the supervisor had supplied in his reports during the growing season.

As has been the case during the past eighteen years, the project was planned and supervised under the guidance of Dr. J. B. Harrington, Professor of Field Husbandry, University of Saskatchewan, Saskatoon. The threshing, summarizing and statistical analysis in connection with the project were carried out at Head Office of the Saskatchewan Wheat Pool under the direction and supervision of I. K. Mumford.



The threshing machine at the Wheat Pool Head Office in Regina.

## **FACTS TO BE REMEMBERED IN READING AND STUDYING RESULTS**

The information compiled from the results of tests carried out during a single year should not be considered as conclusive evidence in the selection of a variety. A variety which gives a favorable performance in any one season may not do well under conditions which exist the following year. When making a choice, therefore, the farmer is advised to study the results of several years' tests and in this regard the pamphlet entitled "Varieties of Grain Crops for Saskatchewan, 1954," is recommended. This pamphlet is compiled by the Saskatchewan Advisory Council on Grain Crops on the basis of information derived from tests conducted under the supervision of the University of Saskatchewan, the Canada Experimental Farms, and the Saskatchewan Wheat Pool. Copies

have been supplied to each Pool Elevator agent for the use of farmers in his district. Additional copies may be obtained free of charge from the University of Saskatchewan, Saskatoon; The Saskatchewan Department of Agriculture, Regina; the Saskatchewan Wheat Pool, Regina; or any Canada Experimental Farm in the province.

### Necessary Difference

The statistical term, "Necessary Difference," is used in different parts of this report. The "Necessary Difference" is calculated by applying an approved statistical formula to the yield results of each individual test. The result of the calculation is shown in bushels per acre and it represents the amount by which a variety must outyield another variety in the test in order to be considered significantly superior in yield.

### Straw Strength

Straw strength was reported on the basis 10-0. If the plants in a plot were straight and erect, the strength of the straw was recorded as 10. If the straw showed signs of weakness a lower figure was used, depending upon the degree of weakness observed.

### Neck Strength

This term appears only in the section of the report dealing with barley tests. Neck strength was recorded on the basis of 1, 2, 3, where 1 indicated a strong neck holding the head upright, 2 indicated a neck of medium strength, while 3 was used when the neck appeared weak.

### Results of Individual Tests

The results of individual tests appear in the following tables: Wheat, No. 26, Barley, No. 49, Flax, No. 62. These results are arranged according to Wheat Pool districts (illustrated on page 5), so that a reader who wishes to study the results in a particular area may readily locate the tests in which he is interested. It should be emphasized that the results of a single test give an accurate comparison of the varieties only under the conditions which exist on the farm where the test is located. An examination of the results in these tables will reveal the fact that the varieties do not show similar relationships in all areas of the province. Results may differ widely, even in tests grown relatively close together. This variation may be due to several causes, most important of which are differences in soil type, climatic conditions, and date of seeding.

### Grading Remarks

In determining commercial grades, bushel weight is a very important factor. However, there are many other factors which may lower the grade of a sample.



David Hainstock of Hart standing in his wheat test.



In the individual results, the column headed "Grading Remarks" contains abbreviations which are used to denote any adverse characteristics other than bushel weight, which appear in the sample of grain.

The following abbreviations have been used to indicate the various defects:

**Bl.**—Bleached  
**B.P.**—Black Point  
**D.**—Dark  
**D.G.**—Dark Green

**F.**—Frosted  
**B.F.**—Badly Frosted  
**S.G.**—Some Green  
**G.**—Green

**I.**—Immature  
**St.**—Stained  
**Stch.**—Starchy  
**W.**—Weathered

### ANALYSIS OF DATA

The individual tests were grouped for analysis on the basis of cereal variety zones. These zones are illustrated on pages 40 and 41. The zone boundaries are laid out by the Saskatchewan Advisory Council on Grain Crops. Each zone represents an area in which conditions influencing plant growth are generally similar. However, local conditions within a zone may vary considerably from the average of the zone. It should be noted that some changes were made in the zone borders for 1954 as a result of study by the Advisory Council on Grain Crops. As stated in the section on "Results of Individual Tests" above, it is preferable to study the results of a number of tests in a zone rather than the results of any single test which might be affected by local conditions.

### RAINFALL

As the amount of rainfall during the growing season has a greater influence upon the yields than the amount of annual precipitation, the rainfall shown in the following table covers only the months representing the growing period of wheat in Saskatchewan.

**TABLE No. 1.—AVERAGE MONTHLY PRECIPITATION IN INCHES  
DURING THE PERIOD MAY-AUGUST  
SUMMARIZED BY CEREAL VARIETY ZONES**

Cereal Variety Zone	May	June	July	August	Total
1A.....	2.63	3.98	1.29	.98	8.88
1B.....	2.57	4.23	.89	1.93	9.62
1C.....	2.74	4.11	1.25	.98	9.08
1D.....	1.61	2.51	1.89	1.99	8.00
2A.....	3.18	6.53	1.87	2.04	13.62
2B.....	2.38	2.47	2.59	1.63	9.07
2C.....	2.42	3.10	1.00	—	6.52
2D.....	1.26	.93	2.45	1.55	6.19
2E.....	3.98	5.11	1.78	1.07	11.94
3A.....	2.58	5.41	2.09	1.19	11.27
3B.....	3.13	5.59	3.78	2.12	14.62
3C.....	2.84	4.93	3.51	2.24	13.52
3D.....	.25	2.53	2.22	.87	5.87
3E.....	1.22	1.54	3.60	3.29	9.65
3F.....	1.97	2.63	3.26	2.19	10.05
3G.....	.83	1.16	2.99	1.97	6.95
3J.....	.98	2.13	1.76	1.73	6.60
4A.....	2.35	3.65	5.10	3.74	14.84
4B.....	1.17	1.90	2.67	2.55	8.29

**Note.**—The above table was compiled from monthly rainfall records kept by test supervisors. Each supervisor was supplied with a rain gauge and one of his duties was to keep a monthly precipitation record.

## WHEAT TESTS

The wheat project consisted of 174 field tests and these were distributed throughout the grain growing area of the province. Seven varieties were tested. Thatcher, Selkirk (W-200) and S-250 were included in all zones. Rescue and Chinook, both sawfly-resistant varieties, were grown in the open prairie region (Cereal Variety Zones 1A to 2E).<sup>\*</sup> They were replaced by Lee and Nugget in the parkland and wooded regions (Cereal Variety Zones 3A to 4B).<sup>\*</sup>

### DESCRIPTION OF VARIETIES

**NOTE**—For a report on official recommendations, and yielding ability of the following varieties, see "Summarization According to Cereal Variety Zones" on page 14.

**Thatcher**, the most widely grown spring wheat variety in Saskatchewan, is used in these tests as the standard of comparison for new varieties. It was developed to meet the need for a wheat of high milling and baking quality, which was resistant to the races of stem rust prevalent in the mid-1930's. Thatcher is highly resistant to spring frost damage and to shattering, but tends to bleach if exposed to fall weathering. It is resistant to stem rust (except race 15B) and to loose smut, but is susceptible to leaf rust and covered smut. It is moderately resistant to common rootrot. Thatcher was developed at the Minnesota Agricultural Experiment Station in 1921.

**Selkirk (CT-186)**, the first bread wheat variety to be introduced which is resistant to race 15B stem rust, was developed at the Laboratory of Cereal Breeding, Winnipeg. It was licensed in December, 1953. It was grown in Wheat Pool tests under the code number W-200. In appearance Selkirk resembles Redman, one of its parents. Compared with Thatcher, it has straw of equal length and strength, equal maturity and resistance to shattering, and less tendency to bleach. The outstanding feature of Selkirk is its resistance to race 15B stem rust, but it is also resistant to loose and covered smut. Selkirk is being distributed for the first time in 1954. Only a limited quantity of seed is available as yet and this is being distributed in small lots to farmers in the area where stem rust is a serious threat.

**S-250**—This is a code number for a new unlicensed selection made at the Scott Experimental Station from the cross Regent x Canus. S-250 is still in the early testing stage. Compared with Thatcher it is taller, slightly later maturing and has less strong straw. It is resistant to covered smut and stem rust (except race 15B) and is susceptible to loose smut.

**Rescue**, the first sawfly-resistant bread wheat variety to be introduced, was developed at Swift Current Experimental Station from a cross between Apex and a solid stemmed variety. Since its release several years ago, it has played an important part in combatting the sawfly problem. Compared with Thatcher, Rescue is equal in height, weaker in straw and slightly later in maturity. It has less resistance to shattering but more resistance to bleaching. Rescue is moderately susceptible to common rootrot and is susceptible to covered and loose smuts, and to leaf rust. It is also susceptible to spring frost damage.

**Chinook** is a new sawfly-resistant, bread wheat variety, originated at Swift Current Experimental Station as a replacement for Rescue. It is the result of a cross between Thatcher and a solid stemmed wheat. It is superior to Rescue in quality and bushel weight. Compared with Thatcher it has taller, weaker straw, equal maturity and less resistance to shattering. It is resistant to stem rust (except race 15B), moderately susceptible to common rootrot, and susceptible to covered smut, loose smut and leaf rust. Chinook is susceptible to spring frost damage.

**Lee** is a bearded, bread wheat developed at the University of Minnesota. Compared with Thatcher it has shorter, slightly weaker straw, slightly later maturity, equal resistance to shattering and equal bushel weight. The kernels are larger and have less tendency to bleach. It is moderately susceptible to spring frost damage. Lee is resistant to leaf rust and to stem rust (except race 15B). It is moderately resistant to common rootrot but is susceptible to bunt and loose smut.

<sup>\*</sup>—See Cereal Variety Zone map, page 41.

**Nugget** is the only durum variety in Wheat Pool tests this year. Compared with **Stewart**, it has shorter, weaker straw and earlier maturity. **Nugget** is later than most bread wheat varieties. It is resistant to stem rust (except race 15B), leaf rust and rootrot, but is moderately susceptible to loose and covered smuts. **Nugget** is eligible for the top Amber Durum grades. This variety was originated at the North Dakota Experimental Station. Its parentage includes **Mindum**, **Carleton**, **Heiti** and **Stewart**.

TABLE No. 2.—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	No. of Satisfactory Tests	Thatcher	Selkirk	S-250	Rescue	Chinook	Lee	Nugget	Necessary Difference* in Bushels
1A**	18	30.5	29.8	26.4	27.0	28.7	—	—	1.32
1B	6	27.3	25.8	24.4	24.0	27.4	—	—	2.56
1C	11	29.0	28.7	26.2	25.9	27.9	—	—	1.54
1D	3	41.3	38.7	35.9	35.4	35.0	—	—	N.S.
2A	6	24.6	33.8	22.8	25.9	27.0	—	—	2.23
2B	17	29.4	29.7	28.9	28.8	29.7	—	—	1.74
2D	4	17.0	15.6	15.7	15.0	15.3	—	—	2.22
2E	6	23.4	28.1	22.5	22.9	22.2	—	—	3.65
3A	10	23.7	33.5	22.0	—	—	27.0	18.9	4.35
3B	9	26.4	37.4	25.3	—	—	28.2	18.3	3.36
3C	16	29.3	39.6	33.1	—	—	33.3	26.4	2.10
3D	3	35.1	35.0	31.4	—	—	35.4	34.9	5.16
3E	8	32.6	33.4	30.6	—	—	27.5	26.4	3.25
3F	4	29.4	32.9	28.3	—	—	27.4	22.1	3.81
3G	4	29.8	26.5	24.9	—	—	24.4	24.6	2.89
3J	3	28.5	29.1	27.3	—	—	25.4	26.2	2.95
4A	3	32.0	37.7	35.7	—	—	29.8	27.8	N.S.
4B	5	30.0	31.3	28.9	—	—	24.1	26.6	2.61

\* **Necessary Difference.**—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. "Necessary difference" is a statistical measurement of this difference. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables, little confidence can be placed in the superiority of one variety over the other in that particular zone group.

N.S.—No significant grain yield difference between varieties.

\*\* One test from zone 2C included with 1A.

Table No. 2. Zones 1A to 2E. Over most of this region **Thatcher** was superior in yield. It exceeded all other varieties in Zones 1A, 1C, 1D and 2D, and was practically equal to the top yielder in zones 1B and 2B. In the two other zones, however, where rust was an important factor, **Thatcher** was outyielded significantly by **Selkirk**, the new variety which is resistant to race 15B. **Selkirk** generally gave a good performance even where rust was not serious. In these zones it placed second to **Thatcher** by a narrow margin, and was at least equal to any other variety in yielding ability. **Chinook** placed third in yield on an average basis, although it outyielded all other varieties in Zone 1B and equaled **Selkirk** for first place in Zone 2B. It outyielded **Rescue**, the other sawfly-resistant variety, in six of the eight zones. **S-250** was fourth in yield on an average basis. It was outyielded by all other varieties in Zones 1A and 2A. On an average basis, **Rescue** placed fifth in yield throughout the region.

Zones 3A to 4B. The superiority of **Selkirk** under severe rust conditions was demonstrated noticeably in this group of zones. It ranked first in yield on an average basis over the entire area, but its advantage was most evident in Zones 3A, 3B and 3C where it outyielded all other varieties by a wide margin. These are the zones in this group in which race 15B stem rust was most severe during the 1953 season. **Selkirk** actually outyielded all other varieties in eight of the ten zones in the 3A to 4B group. Apart from the worst rust area, however, its yield advantage over **Thatcher** and **Lee** was often not of a significant nature and further tests must be conducted before its relative ability under rust-free conditions can be determined. **Thatcher** ranked second in yield on an average basis, **S-250** was third, and **Lee** placed fourth. Comparing the varieties on a zone basis, **Thatcher** and **S-250** outyielded **Lee** in six zones in the north and northwest. In several of these zones the yield differences were significant. **Lee**, however, exceeded **Thatcher** and **S-250** in yield in the southeast and eastern zones, 3A, 3B and 3C. Only in 3C were the yield differences of a significant nature, but **Lee** appeared to have a slight advantage over both varieties in these eastern regions. **Thatcher** outyielded **S-250** in nine of the ten zones in the 3A to 4B group. **Nugget**, the only durum variety tested, gave a relatively poor yield performance. It placed fifth in yield on an average basis, and was outyielded by all other varieties in six of the ten zones.



TABLE No. 3.—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Selkirk	S-250	Rescue	Chinook	Lee	Nugget
1A.....	101.8	102.5	102.5	102.1	101.5	—	—
1B.....	92.5	93.0	92.5	96.5	93.0	—	—
1C.....	102.2	103.0	105.4	103.8	102.8	—	—
1D.....	—	—	—	—	—	—	—
2A.....	103.7	103.7	102.7	104.0	103.7	—	—
2B.....	97.9	98.3	98.6	98.3	97.9	—	—
2D.....	106.0	106.3	107.0	107.0	107.0	—	—
2E.....	91.0	91.0	93.0	91.0	93.0	—	—
3A.....	104.3	105.3	107.4	—	—	104.1	103.4
3B.....	105.3	105.8	108.5	—	—	106.8	106.0
3C.....	103.7	110.6	109.3	—	—	109.3	110.0
3D.....	114.0	115.0	117.0	—	—	117.0	116.0
3E.....	102.8	103.0	102.8	—	—	105.0	102.3
3F.....	107.7	108.3	110.3	—	—	109.3	108.7
3G.....	120.0	120.0	120.0	—	—	119.0	119.0
3J.....	—	—	—	—	—	—	—
4A.....	111.0	108.0	108.0	—	—	111.5	111.5
4B.....	99.3	100.0	101.3	—	—	101.8	103.3

Table No. 3. Zones 1A to 2E. Although **Thatcher** was slightly earlier than the other varieties on an average basis, the differences in maturity period were only of a minor nature.

Zones 3A to 4B. On an average basis, the different varieties matured in the following order: Thatcher, Selkirk, Nugget, Lee, S-250.

TABLE No. 4.—AVERAGE HEIGHT OF PLANTS IN INCHES  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Selkirk	S-250	Rescue	Chinook	Lee	Nugget
1A.....	31.0	30.2	32.9	32.2	32.4	—	—
1B.....	30.3	29.3	31.0	30.3	30.6	—	—
1C.....	26.3	23.7	27.4	25.3	26.7	—	—
1D.....	—	—	—	—	—	—	—
2A.....	31.0	31.8	35.2	33.2	32.0	—	—
2B.....	30.3	29.6	31.8	30.9	31.6	—	—
2D.....	20.0	18.0	20.3	20.7	19.7	—	—
2E.....	27.5	25.5	29.5	29.0	28.0	—	—
3A.....	39.8	39.8	41.9	—	—	38.6	39.9
3B.....	38.0	38.8	40.9	—	—	37.8	37.9
3C.....	39.3	37.8	40.8	—	—	37.2	40.3
3D.....	32.5	31.5	35.5	—	—	32.5	32.5
3E.....	29.4	29.0	29.2	—	—	29.3	30.7
3F.....	41.5	41.5	43.0	—	—	41.0	42.5
3G.....	28.3	27.0	27.7	—	—	28.3	27.3
3J.....	26.0	25.5	27.5	—	—	26.5	26.5
4A.....	43.0	43.0	43.0	—	—	43.0	43.0
4B.....	29.0	29.0	31.4	—	—	29.4	28.0

Table No. 4. Zones 1A to 2E. S-250 exceeded the other varieties in height in six of the seven zones. Chinook generally placed second, followed closely by **Rescue**, **Thatcher** and **Selkirk** in that order.

Zones 3A to 4B. Generally, S-250 was the tallest variety, followed by **Nugget**, **Thatcher**, **Lee** and **Selkirk** in that order.

TABLE No. 5.—AVERAGE STRAW STRENGTH OF PLANTS  
ON THE BASIS 10 (STRONG)—0 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Selkirk	S-250	Rescue	Chinook	Lee	Nugget
1A.....	8.0	8.7	8.2	8.0	8.3	—	—
1B.....	8.8	8.2	8.6	8.0	7.6	—	—
1C.....	9.1	9.2	9.1	9.1	9.2	—	—
1D.....	—	—	—	—	—	—	—
2A.....	7.4	8.4	7.7	8.1	7.2	—	—
2B.....	7.4	7.8	8.1	8.5	8.1	—	—
2D.....	7.4	7.5	8.0	9.0	8.9	—	—
2E.....	8.9	9.4	8.3	8.3	8.5	—	—
3A.....	9.3	9.6	9.1	—	—	6.8	5.6
3B.....	8.8	9.6	9.3	—	—	7.9	5.3
3C.....	8.7	9.1	8.8	—	—	7.1	5.2
3D.....	9.7	9.4	9.3	—	—	8.8	7.7
3E.....	9.2	9.1	9.5	—	—	8.9	8.1
3F.....	6.7	7.6	6.9	—	—	6.7	4.6
3G.....	7.3	9.3	9.8	—	—	9.8	8.5
3J.....	8.3	8.3	8.5	—	—	8.8	7.3
4A.....	8.5	8.9	8.4	—	—	8.4	7.7
4B.....	9.3	9.2	9.1	—	—	8.5	7.1

Table No. 5. Zones 1A to 2E. Differences in straw strength were of a minor nature in these zones, although **Thatcher** was slightly weaker than the other varieties on an average basis.

Zones 3A to 4B. An average of all tests indicates that **Selkirk** had slightly stronger straw than the other varieties. It was followed closely by **S-250**, **Thatcher** and **Rescue**. The durum variety, **Nugget**, showed definite weakness in straw strength.

TABLE No. 6.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Thatcher	Selkirk	S-250	Rescue	Chinook	Lee	Nugget
1A.....	62.0	60.8	61.6	62.3	63.7	—	—
1B.....	62.5	60.0	61.6	63.5	64.5	—	—
1C.....	62.3	61.0	61.8	62.7	64.0	—	—
1D.....	63.8	62.3	62.5	63.5	64.3	—	—
2A.....	59.3	61.3	58.3	59.6	61.8	—	—
2B.....	62.1	60.9	61.5	62.6	63.8	—	—
2D.....	61.9	60.6	61.3	61.9	63.3	—	—
2E.....	59.7	61.2	59.5	60.3	61.2	—	—
3A.....	59.1	61.2	58.1	—	—	60.4	56.2
3B.....	58.5	61.4	58.4	—	—	59.5	54.5
3C.....	59.8	61.6	59.8	—	—	60.2	57.5
3D.....	63.3	62.3	63.3	—	—	62.3	63.3
3E.....	62.5	61.9	62.3	—	—	59.7	61.0
3F.....	61.8	60.2	61.2	—	—	60.4	59.4
3G.....	62.5	61.5	62.5	—	—	61.5	62.8
3J.....	62.3	62.3	63.0	—	—	61.7	62.7
4A.....	60.0	59.5	59.8	—	—	59.0	59.0
4B.....	63.3	62.0	62.7	—	—	62.0	61.8

Table No. 6. Zones 1A to 2E. Generally **Chinook** was somewhat superior to the other varieties in bushel weight. **Rescue** and **Thatcher** were practically equal on an average basis, while **Selkirk** and **S-250** placed fourth and fifth. It is interesting to note, however, that **Selkirk** compared most favorably with the other varieties in Zones 2A and 2E, where stem rust race 15B was prevalent. The good performance of **Selkirk** in these zones was undoubtedly due to its resistance to this disease.

Zones 3A to 4B. On an average basis **Thatcher**, **Selkirk** and **S-250** were practically equal. **Lee** averaged slightly lower and **Nugget** samples were generally inferior in bushel weight. Again in this group of zones, **Selkirk** was superior in the area most severely affected by rust.

TABLE No. 7—PERCENTAGE OF COMMERCIAL GRADES BY VARIETIES  
(ZONES 1A TO 2E)

Variety	1 Nor.	2 Nor.	3 Nor.	4 Nor.	No. 4 Spec.	No. 5
	%	%	%	%	%	%
Thatcher.....	31.3	50.6	14.5	3.6	—	—
Selkirk.....	19.3	45.8	31.3	1.2	1.2	1.2
S-250.....	16.9	48.2	27.7	4.8	1.2	1.2
Rescue.....	48.2	37.4	12.1	2.3	—	—
Chinook.....	63.9	27.7	8.4	—	—	—

(ZONES 3A TO 4B)

Variety	2 Nor.	3 Nor.	4 Nor.	No. 4 Spec.	No. 5	No. 5 Spec.	No. 6	Feed
	%	%	%	%	%	%	%	%
Thatcher.....	28.2	52.1	11.3	—	5.6	1.4	1.4	—
Selkirk.....	22.6	52.1	22.5	—	2.8	—	—	—
S-250.....	16.9	49.3	21.1	—	9.9	—	1.4	1.4
Lee.....	14.2	32.4	42.2	1.4	7.0	—	1.4	1.4

	1 C.W.	2 C.W.	3 C.W.	4 C.W.	5 C.W.	6 C.W.	Feed
	%	%	%	%	%	%	%
Nugget.....	2.8	11.3	36.6	25.3	11.3	5.6	7.1

Table No. 7. All varieties graded well as a result of high bushel weight and good harvest weather. On an average basis, **Chinook** and **Rescue** produced higher grades than the others. **Selkirk** and **S-250** were practically equal and slightly below **Thatcher**. In general, **Lee** had lower grades than the other bread wheats tested.

## SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

In comparing the performance of the varieties in a particular district, it is advisable to study, not only the results of an individual test in that district, but also the average results of all tests conducted under similar conditions in the surrounding area. Accordingly, the following section of the booklet has been prepared, showing the average results of all tests within each cereal variety zone. These cereal variety zones are illustrated on page 41. Each zone represents an area within which conditions of growth are generally similar, although in some cases local variations occur which may influence the performance of a variety.

Because weather conditions vary considerably from year to year, the results of several years' tests should be considered in judging the ability of a variety. The discussions of yield performance which follow are based on information obtained from Wheat Pool tests over a period of years.

The "official recommendations" referred to in the following pages are the recommendations of the Saskatchewan Advisory Council on Grain Crops (formerly the Saskatchewan Cereal Variety Committee).



Richard Schmalz of Shellbrook standing behind his wheat test.

TABLE No. 8.—SUMMARIZED RESULTS FOR ZONE 1A  
(18 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	30.5	29.8	26.4	27.0	28.7
Days from seeding to ripening.....	101.8	102.5	102.5	102.1	101.5
Height of plants in inches.....	31.0	30.2	32.9	32.2	32.4
Straw strength (maximum of 10).....	8.0	8.7	8.2	8.0	8.3
Bushel weight in pounds.....	62.0	60.8	61.6	62.3	63.7
Commercial grades in percentage:					
1 Nor.....	41.7	16.7	16.7	58.3	83.3
2 Nor.....	50.0	66.7	62.5	37.5	16.7
3 Nor.....	8.3	12.7	12.5	4.2	—
4 Nor.....	—	—	8.3	—	—
No. 5 Spec.....	—	4.1	—	—	—

Necessary difference—1.3 bushels.

### Yield Performance During Recent Years—Zone 1A

Thatcher outyielded all other varieties in 1953, exceeding Chinook, Rescue and S-250 by differences which are significant. Thatcher has been used for many years as the standard of comparison in these tests, and it has consistently been a high yielder in this zone. Because of its excellent performance Thatcher is highly recommended for use in Zone 1A.

Selkirk was tested for the first time in 1953. Its most important feature is resistance to stem rust race 15B. As this disease is not a serious threat in most parts of Zone 1A, Selkirk has not yet been recommended



for this area. Further tests are required to determine its yielding ability over a period of years, and final recommendations for its general use will be made after several years of testing have been completed.

**Chinook** has been tested for the past two years and was outyielded by Thatcher both times. Chinook is resistant to sawflies, however, and this is an important characteristic in Zone 1A. Chinook significantly outyielded Rescue, the other sawfly-resistant variety, in the 1953 tests. It has replaced Rescue as an officially recommended variety for this zone.

**Rescue** placed fourth in yield in 1953. This variety has been valuable for sawfly control in the area, but is now being succeeded by Chinook.

**S-250** was tested for the first time in 1953 and was outyielded by all other varieties. As results for a single year do not provide conclusive evidence, further tests are necessary before the suitability of S-250 can be determined.

**TABLE No. 9.—SUMMARIZED RESULTS FOR ZONE 1B**  
(6 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	27.3	25.8	24.4	24.0	27.4
Days from seeding to ripening.....	92.5	93.0	92.5	96.5	93.0
Height of plants in inches.....	30.3	29.3	31.0	30.3	30.6
Straw strength (maximum of 10).....	8.8	8.2	8.6	8.0	7.6
Bushel weight in pounds.....	62.5	60.0	61.6	63.5	64.5
Commercial grades in percentage: 1 Nor.....	66.7	50.0	66.7	66.7	100.0
2 Nor.....	16.6	33.3	16.6	33.3	—
3 Nor.....	16.7	—	16.7	—	—
No. 4 Spec.....	—	16.7	—	—	—

Necessary difference—2.6 bushels.

#### **Yield Performance During Recent Years—Zone 1B**

**Chinook** and **Thatcher** were practically equal in yield in 1953, and both outyielded the other varieties in this zone. In similar tests during the previous five years Thatcher gave an outstanding performance, outyielding all other varieties four times and placing second once. Chinook is a relatively new sawfly-resistant variety, which should receive consideration where sawfly damage is expected.

**Selkirk** placed third in yield in 1953, but failed to exceed any other variety by a significant margin. This is the first year that Selkirk has been used in Wheat Pool tests.

**S-250** placed fourth in yield in 1953, the first year it was tested.

**Rescue** was outyielded by all other varieties in 1953. It is recommended for this area, however, because of its sawfly resistance and its good performance in past years.

**TABLE No. 10.—SUMMARIZED RESULTS FOR ZONE 1C**  
(11 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	29.0	28.7	26.2	25.9	27.9
Days from seeding to ripening.....	102.2	103.0	105.4	103.8	102.8
Height of plants in inches.....	26.3	23.7	27.4	25.3	26.7
Straw strength (maximum of 10).....	9.1	9.2	9.1	9.1	9.2
Bushel weight in pounds.....	62.3	61.0	61.8	62.7	64.0
Commercial grades in percentage: 1 Nor.....	50.0	50.0	41.7	83.3	100.0
2 Nor.....	50.0	25.0	50.0	16.7	—
3 Nor.....	—	25.0	8.3	—	—

Necessary difference—1.5 bushels.

#### **Yield Performance During Recent Years—Zone 1C**

**Thatcher** and **Selkirk** were practically equal in yield in this zone in 1953. Both outyielded all other varieties significantly. Thatcher has been a top yielder in this area during past years, and is officially recommended. Only one year's results are available for Selkirk. Its resistance to stem rust race 15B is not an important factor in Zone 1C, and further tests will be carried out to determine its yielding ability before recommendations are made.

**Chinook** placed third in yield, exceeding both S-250 and Rescue by yield differences which are significant. It has been lower yielding than Thatcher

but superior to Rescue over a two-year testing period in this area. Like Rescue, it is resistant to sawflies, and because of its generally good performance and high quality Chinook is recommended for this zone.

S-250 was tested for the first time in 1953.

Rescue was low in yield in 1953, and has been dropped from the official recommendations for Zone 1C.

**TABLE No. 11.—SUMMARIZED RESULTS FOR ZONE 1D**  
(3 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	41.3	38.7	35.9	35.4	35.0
Days from seeding to ripening.....	—	—	—	—	—
Height of plants in inches.....	—	—	—	—	—
Straw strength (maximum of 10).....	—	—	—	—	—
Bushel weight in pounds.....	63.8	62.3	62.5	63.5	64.3
Commercial grades in percentage: 1 Nor.....	100.0	75.0	50.0	100.0	100.0
2 Nor.....	—	25.0	25.0	—	—
3 Nor.....	—	—	25.0	—	—

No significant grain yield difference between varieties.

#### Yield Performance During Recent Years—Zone 1D

Thatcher yielded somewhat higher than the other varieties in 1953, but in no case was the difference significant. Since this zone was recently established, no yield data is available for past years. However, in Zone 1B, which previously contained a large area of what is now Zone 1D, Thatcher has consistently yielded well.

Selkirk ranked second in this zone during its first year of testing.

S-250 ranked third in 1953. It has been tested by the Wheat Pool for only one year.

Rescue placed fourth in yield. Because of its sawfly resistance, it is officially recommended for this zone.

Chinook was outyielded by all other varieties in the 1953 tests.

**TABLE No. 12.—SUMMARIZED RESULTS FOR ZONE 2A**  
(6 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	24.6	33.8	22.8	25.9	27.0
Days from seeding to ripening.....	103.7	103.7	102.7	104.0	103.7
Height of plants in inches.....	31.0	31.8	35.2	33.2	32.0
Straw strength (maximum of 10).....	7.4	8.4	7.7	8.1	7.2
Bushel weight in pounds.....	59.3	61.3	58.3	59.6	61.8
Commercial grades in percentage: 1 Nor.....	14.0	—	—	—	43.0
2 Nor.....	43.0	57.0	43.0	15.0	57.0
3 Nor.....	29.0	43.0	29.0	57.0	—
4 Nor.....	14.0	—	14.0	14.0	—
No. 4 Spec.....	—	—	14.0	14.0	—

Necessary difference—2.2 bushels.

#### Yield Performance During Recent Years—Zone 2A

Selkirk significantly outyielded all other varieties tested in this zone in 1953. As this was its first year in Wheat Pool tests, no previous yield comparisons are available. However, the outstanding performance of Selkirk during the past season is a striking example of its importance under stem rust conditions. Because of this factor, Selkirk is officially recommended for use in the zone.

Chinook, in second place, outyielded Rescue, Thatcher and S-250 significantly in the 1953 tests. In 1952 it ranked fifth.

Rescue placed third in 1953, outyielding S-250 significantly. In five previous years of testing Rescue has always been lower in yield than Thatcher, although it outyielded the standard variety by a narrow margin in 1953.

Thatcher placed fourth in yield during each of the past two years. For many years previously, however, it ranked first or second in the zone and is officially recommended.

S-250 was tested for the first time in 1953.

**TABLE No. 13.—SUMMARIZED RESULTS FOR ZONE 2B**  
(17 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	29.4	29.7	28.9	28.8	29.7
Days from seeding to ripening.....	97.9	98.3	98.6	98.3	97.9
Plant height in inches.....	30.3	29.6	31.8	30.9	31.6
Straw strength (maximum of 10).....	7.4	7.8	8.1	8.5	8.1
Bushel weight in pounds.....	62.1	60.9	61.5	62.6	63.8
Commercial grades in percentage: 1 Nor.....	14.0	—	—	33.0	33.0
2 Nor.....	76.0	48.0	52.0	57.0	62.0
3 Nor.....	10.0	52.0	48.0	10.0	5.0

Necessary difference—1.7 bushels.

### Yield Performance During Recent Years—Zone 2B

Yield differences in 1953 were of a minor nature, and should not be considered of importance.

**Selkirk** was tested for the first time in 1953. Its resistance to race 15B stem rust is not likely to be an important consideration here, and no recommendations will be made until its regional suitability is determined by additional tests.

**Chinook** has been tested for two years, placing fifth in the 1952 Wheat Pool project. It gave a good performance in 1953, and its resistance to sawflies may be of considerable importance in this zone. It is officially recommended.

**Thatcher** has been used in tests in this zone for the past 15 years and has consistently been high in yield. It is officially recommended.

**S-250** will be tested further before definite recommendations are made.

**Rescue** placed fifth in this zone in 1953. It was replaced by Chinook in the official recommendations for 1954.



Left, Gordon O'Byrne of Wilcox; centre, Billy Joblonski of Hume;  
right, Eleanor Rindal of Domremy.

### CEREAL VARIETY ZONE 2C

In Zone 2C only one successful wheat test was conducted. For analysis purposes it was included with Zone 1A. The results of this test will be found in the table "Individual Summarized Results of All Tests—Wheat" under District 4, Sub-district 3, conducted by Carolyn Stern of Wymark.

**TABLE No. 14.—SUMMARIZED RESULTS FOR ZONE 2D**  
(4 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	17.0	15.6	15.7	15.0	15.3
Days from seeding to ripening.....	106.0	106.3	107.0	107.0	107.0
Plant height in inches.....	20.0	18.0	20.3	20.7	19.7
Straw strength (maximum of 10).....	7.4	7.5	8.0	9.0	8.9
Bushel weight in pounds.....	61.9	60.6	61.3	61.9	63.3
Commercial grades in percentage: 1 Nor.....	14.0	14.0	14.0	29.0	29.0
2 Nor.....	29.0	14.0	14.0	14.0	29.0
3 Nor.....	57.0	72.0	72.0	57.0	42.0

Necessary difference—2.2 bushels.

### Yield Performance During Recent Years—Zone 2D

Differences in yield in this zone were of a minor nature and should not be considered significant.

**Thatcher** was highest in yield. It has placed first or second consistently in this zone during twelve of the past thirteen years. Because of this outstanding performance it is officially recommended.

**S-250** and **Selkirk** have been tested for only one year by the Wheat Pool. Further tests will be carried out before definite recommendations are made regarding these two varieties.

**Chinook** placed fourth in yield out of five varieties in each of the past two years. Because of its sawfly resistance and high quality it is recommended to replace **Rescue** in this zone.

**Rescue** has been tested during five of the past six years in this zone, placing third, fourth or fifth each time. It is not recommended for use in Zone 2D.

TABLE No. 15.—SUMMARIZED RESULTS FOR ZONE 2E  
(6 satisfactory tests)

	Thatcher	Selkirk	S-250	Rescue	Chinook
Yield in bushels per acre.....	23.4	28.1	22.5	22.9	22.2
Days from seeding to ripening.....	91.0	91.0	93.0	91.0	93.0
Plant height in inches.....	27.5	25.5	29.5	29.0	28.0
Straw strength (maximum of 10).....	8.9	9.4	8.3	8.3	8.5
Bushel weight in pounds.....	59.7	61.2	59.5	60.3	61.2
Commercial grades in percentage: 1 Nor.....	17.0	33.0	—	33.0	50.0
2 Nor.....	33.0	33.0	50.0	17.0	—
3 Nor.....	17.0	17.0	16.0	33.0	50.0
4 Nor.....	33.0	17.0	17.0	17.0	—
No. 5.....	—	—	17.0	—	—

Necessary difference—3.7 bushels.

### Yield Performance During Recent Years—Zone 2E

**Selkirk** outyielded all other varieties significantly in 1953, demonstrating once again the outstanding performance of this variety in areas where stem rust race 15B is prevalent. Although this is the first year in which **Selkirk** has been tested, it has already demonstrated its value and has been recommended for use in this zone.

**Thatcher** placed second in yield, although its advantage over the three remaining varieties was in no case significant. **Thatcher** has been used in tests in this area for many years and has usually been the highest yielding bread wheat variety. It is officially recommended for this area.

**Rescue** placed third in yield. It has always yielded less than **Thatcher** in Wheat Pool tests in this zone. **Rescue** is not recommended for Zone 2E.

**S-250** was fourth in yield in 1953, the first year it was used in these tests.

**Chinook** placed fifth in yield in both 1952 and 1953. It is not recommended for use in this zone.

TABLE No. 16.—SUMMARIZED RESULTS FOR ZONE 3A  
(10 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	23.7	33.5	22.0	27.0	18.9
Days from seeding to ripening.....	104.3	105.3	107.4	104.1	103.4
Plant height in inches.....	39.8	39.8	41.9	38.6	39.9
Straw strength (maximum of 10).....	9.3	9.6	9.1	6.8	5.6
Bushel weight in pounds.....	59.1	61.2	58.1	60.4	56.2
Commercial grades in percentage: 1 Nor.....	—	—	—	—	Durum Grades
2 Nor.....	50.0	50.0	30.0	50.0	2 C.W. 20.0
3 Nor.....	40.0	50.0	50.0	40.0	3 C.W. 40.0
4 Nor.....	—	—	10.0	10.0	5 C.W. 10.0
No. 5.....	10.0	—	10.0	—	6 C.W. 20.0
					Feed 10.0

Necessary difference—4.4 bushels.

### Yield Performance During Recent Years—Zone 3A

**Selkirk** outyielded all other varieties significantly in the 1953 tests. Its resistance to stem rust race 15B is an important feature in this zone



where stem rust is always a definite threat. Because of this resistance, Selkirk gave an outstanding performance in 1953. Although it has been tested for only one year, the information obtained so far has provided conclusive evidence of its value for use in this area.

Selkirk is highly recommended.

Lee placed second in yield in 1953. It was first tested by the Wheat Pool in 1950, when it outyielded all other varieties in Zone 3A. In 1951 and 1952 it placed second. Lee outyielded Thatcher in this area during three of the four years it has been tested by the Wheat Pool. It is officially recommended.

Thatcher placed third in yield in 1952 and 1953. As stated above, it has been outyielded by Lee in three of the past four years. Prior to that time, however, Thatcher was usually the highest yielder in the tests, and it still ranks as one of the best of the 15B-susceptible varieties. It is officially recommended.

S-250 placed fourth in 1953, the first year it was used in Wheat Pool tests.

Nugget, the only durum variety tested, was low in yield both in 1952 and 1953.



Beverley Hamilton, McCord, at the wheat test which she supervised.

TABLE No. 17.—SUMMARIZED RESULTS FOR ZONE 3B  
(9 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	26.4	37.4	25.3	28.2	18.3
Days from seeding to ripening.....	105.3	105.8	108.5	106.8	106.0
Plant height in inches.....	38.0	38.8	40.9	37.8	37.9
Straw strength (maximum of 10).....	8.8	9.6	9.3	7.9	5.3
Bushel weight in pounds.....	58.5	61.4	58.4	59.5	54.5
Commercial grades in percentage:					Durum Grades
2 Nor.....	10.0	20.0	10.0	20.0	2 C.W. 10.0
3 Nor.....	50.0	70.0	60.0	30.0	3 C.W. 10.0
4 Nor.....	10.0	10.0	—	40.0	4 C.W. 20.0
No. 4 Spec.....	—	—	—	10.0	5 C.W. 20.0
No. 5.....	10.0	—	20.0	—	6 C.W. 10.0
No. 5 Spec.....	10.0	—	—	—	—
No. 6.....	10.0	—	—	—	—
Feed.....	—	—	10.0	—	30.0

Necessary difference—3.4 bushels.

#### Yield Performance During Recent Years—Zone 3B

Selkirk outyielded all other varieties significantly in 1953. While only one year's results are available for this variety, it has already demonstrated its value under stem rust conditions. Because of resistance to this disease it has been officially recommended.

Lee placed second in yield in 1953, exceeding Nugget by the difference necessary for significance. Lee was outyielded by Thatcher in each of the

previous three years, but its resistance to leaf rust is worthy of consideration in this zone. It is officially recommended.

**Thatcher** was third in yield in 1953. It outyielded all other varieties significantly in 1952, and was top yielder in Wheat Pool tests during the previous five-year period. It is officially recommended.

**S-250** ranked fourth in 1953, its first year of testing in this zone.

**Nugget** was outyielded by all other varieties in tests during the past two years.

**TABLE No. 18.—SUMMARIZED RESULTS FOR ZONE 3C**  
(16 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	29.3	39.6	33.1	33.3	26.4
Days from seeding to ripening.....	103.7	110.6	109.3	109.3	110.0
Height of plants in inches.....	39.3	37.8	40.8	37.2	40.3
Straw strength (maximum of 10).....	8.7	9.1	8.8	7.1	5.2
Bushel weight in pounds.....	59.8	61.6	59.8	60.2	57.5
Commercial grades in percentage:					
2 Nor.....	35.3	17.6	23.5	17.6	Durum 1 C.W. 5.9
3 Nor.....	52.9	58.9	41.2	41.2	2 C.W. 5.9
4 Nor.....	5.9	17.6	23.5	35.3	3 C.W. 29.4
No. 5.....	5.9	5.9	11.8	5.9	4 C.W. 29.4
No. 6.....	—	—	—	—	5 C.W. 23.5
Feed.....	—	—	—	—	5.9

Necessary difference—2.1 bushels.

#### Yield Performance During Recent Years—Zone 3C

**Selkirk**, in its first year of testing, outyielded all other varieties by a wide margin. Here again, its performance under conditions of stem rust was outstanding. It is officially recommended.

**Lee** and **S-250** were practically equal in yield during 1953. This was the first year of testing for **S-250**. **Lee** has equalled **Thatcher** in average yield over the past four-year period. It is officially recommended.

**Thatcher** placed fourth in yield in 1953. During the previous ten-year period, however, **Thatcher** has consistently been first or second in yield in this zone. It is officially recommended.

**Nugget** has been tested in this zone during the past two years and has been low in yield both times.

**TABLE No. 19.—SUMMARIZED RESULTS FOR ZONE 3D**  
(3 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	35.1	35.0	31.4	35.4	34.9
Days from seeding to ripening.....	114.0	115.0	117.0	117.0	116.0
Plant height in inches.....	32.5	31.5	35.5	32.5	32.5
Straw strength (maximum of 10).....	9.7	9.4	9.3	8.8	7.7
Bushel weight in pounds.....	63.3	62.3	63.3	62.3	63.3
Commercial grades in percentage:					
2 Nor.....	100.0	33.0	33.0	—	Durum 2 C.W. 33.0
3 Nor.....	—	67.0	67.0	100.0	3 C.W. 67.0

Necessary difference—5.2 bushels.

#### Yield Performance During Recent Years—Zone 3D

It should be pointed out that only three satisfactory tests were conducted in this zone during the past year, and the differences in yield cannot be considered of significance. All varieties yielded within a range of one-half bushel, with the exception of **S-250**.

**Lee** yielded well in the 1953 project, but was fourth in yield during each of the previous three seasons. Generally, it has averaged well below **Thatcher** in this zone and is not recommended.

**Thatcher** yielded well, as it has done in all previous tests in the zone. It is the only variety officially recommended.

**Selkirk** was tested for the first time in 1953. As this zone is not usually affected severely by rust, the need for a variety resistant to race 15B is

not urgent. Under the circumstances no recommendation will be made regarding Selkirk until further tests have been conducted.

**Nugget**, the durum variety, has given relatively poor results over the past two years.

**S-250** was tested for the first time in 1953.

**TABLE No. 20.—SUMMARIZED RESULTS FOR ZONE 3E**  
(8 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	32.6	33.4	30.6	27.5	26.4
Days from seeding to ripening.....	102.8	103.0	102.8	105.0	102.3
Plant height in inches.....	29.4	29.0	29.2	29.3	30.7
Straw strength (maximum of 10).....	9.2	9.1	9.5	8.9	8.1
Bushel weight in pounds.....	62.5	61.9	62.3	59.7	61.0
Durum Grades					
Commercial grades in percentage: 2 Nor.....	11.2	—	11.1	—	11.1
3 Nor.....	55.5	55.5	44.4	22.3	3 C.W. 22.3
4 Nor.....	33.3	45.5	33.4	44.4	4 C.W. 55.5
No. 5.....	—	—	—	11.1	5 C.W. 11.1
No. 6.....	—	—	11.1	11.1	6 C.W. —
Feed.....	—	—	—	11.1	—

Necessary difference—3.3 bushels.

#### Yield Performance During Recent Years—Zone 3E

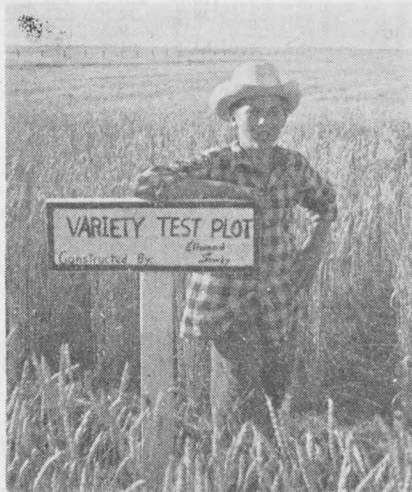
**Selkirk** outyielded all other varieties, the difference being significant in the case of Lee and Nugget. This is the first time it has been included in Wheat Pool tests. As resistance to race 15B stem rust is not important in this zone, further tests will be conducted before definite recommendations are made.

**Thatcher** was second in yield in 1953. Prior to 1952 when it placed third, Thatcher has been an outstanding yielder in this zone, and is the only variety officially recommended.

**S-250** placed third in yield in 1953. Its performance warrants further tests in the zone, but official recommendations regarding the variety will not be made until additional data is obtained.

**Lee** placed fourth in yield in both 1952 and 1953. It has been tested for four years in this zone, and its average yield has been considerably below that of Thatcher.

**Nugget** was outyielded by all other varieties in each of the past two years.



Ellwood Sawby of Golden Prairie with the sign he made for his wheat test.

**TABLE No. 21.—SUMMARIZED RESULTS FOR ZONE 3F**  
(4 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	29.4	32.9	28.3	27.4	22.1
Days from seeding to ripening.....	107.7	108.3	110.3	109.3	108.7
Plant height in inches.....	41.5	41.5	43.0	41.0	42.5
Straw strength (maximum of 10).....	6.7	7.6	6.9	6.7	4.6
Bushel weight in pounds.....	61.8	60.2	61.2	60.4	59.4
Commercial grades in percentage:					
2 Nor.....	40.0	—	20.0	—	—
3 Nor.....	60.0	60.0	60.0	40.0	60.0
4 Nor.....	—	40.0	20.0	60.0	40.0

Necessary difference—3.8 bushels.

### Yield Performance During Recent Years—Zone 3F

**Selkirk** outyielded all other varieties in 1953, the differences being significant except in the case of Thatcher. Selkirk is primarily important because of its resistance to stem rust race 15B. This variety has been tested for only one year, and no recommendations will be made in zones outside the rust area until further data on yield and other characteristics are available.

**Thatcher** placed second in yield in 1953. In 1952 it outyielded all other bread wheat varieties significantly, and was top yielder during each of the previous five years. It is the only variety officially recommended for Zone 3F.

**S-250** was third in yield in 1953, its first year in Wheat Pool tests. This variety will be tested further before official recommendations are made.

**Lee** placed fourth in yield in 1953. It was outyielded by all other varieties in 1952, and has generally given a poor performance in this zone.

**Nugget**, the durum variety, has been tested for two years and has averaged somewhat lower in yield than the bread wheat varieties.

**TABLE No. 22.—SUMMARIZED RESULTS FOR ZONE 3G**  
(4 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	29.8	26.5	24.9	24.4	24.6
Days from seeding to ripening.....	120.0	120.0	120.0	119.0	119.0
Plant height in inches.....	28.3	27.0	27.7	28.3	27.3
Straw strength (maximum of 10).....	7.3	9.3	9.8	9.8	8.5
Bushel weight in pounds.....	62.5	61.5	62.5	61.5	62.8
Commercial grades in percentage:					
1 Nor.....	—	—	—	—	—
2 Nor.....	—	—	—	—	—
3 Nor.....	100.0	75.0	75.0	25.0	25.0
4 Nor.....	—	25.0	25.0	75.0	50.0

Necessary difference—2.9 bushels.

### Yield Performance During Recent Years—Zone 3G

**Thatcher** outyielded all other varieties significantly in this zone. With the exception of 1952 when it placed third, Thatcher has always given an outstanding performance in this area. It is the only variety officially recommended.

**Selkirk** was second in yield during 1953, its first year in Wheat Pool tests. Further tests will be conducted to obtain additional information before definite recommendations are made.

**S-250** ranked third in yield during 1953. This is the first year it has been tested, and like Selkirk, further data will be required before recommendations are made.

**Nugget** and **Lee** were practically equal in yield during the past year. Both of these varieties had been tested previously, averaging well below Thatcher in yield.



**TABLE No. 23.—SUMMARIZED RESULTS FOR ZONE 3J**  
(3 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	28.5	29.1	27.3	25.4	26.2
Days from seeding to ripening.....	—	—	—	—	—
Plant height in inches.....	26.0	25.5	27.5	26.5	26.5
Straw strength (maximum of 10).....	8.3	8.3	8.5	8.8	7.3
Bushel weight in pounds.....	62.3	62.3	63.0	61.7	62.7
Commercial grades in percentage: 2 Nor.....	—	—	—	—	Durum Grades 2 C.W. 33.3
3 Nor.....	100.0	100.0	100.0	33.3	3 C.W. 66.7
4 Nor.....	—	—	—	66.7	4 C.W. —

Necessary difference—3.0 bushels.

### Yield Performance During Recent Years—Zone 3J

This is a new zone created in December, 1953, including an area which previously formed the northern part of Zone 3B. As yield data were not calculated on the basis of this area in previous years, it is difficult to make varietal comparisons.

On the basis of available results, however, **Selkirk** outyielded the other varieties in 1953. Its yield superiority was significant only in the case of **Lee**. **Selkirk** has been tested for only one year, and further data will be obtained before recommendations are made.

**Thatcher** followed **Selkirk** closely in yield in 1953. On the basis of previous tests in this general area, **Thatcher** has averaged higher in yield than any other variety over a period of years. It is the only variety officially recommended for use in Zone 3J.

**S-250** placed third in yield, but was not significantly lower than **Selkirk** or **Thatcher**. This was its first year in Wheat Pool tests.

**Nugget** was fourth in yield in 1953. During 1952 it was outyielded by all other varieties in this general area.

**Lee** was outyielded by all other varieties in 1953. This confirms the results of previous tests in the northern part of the province.

**TABLE No. 24.—SUMMARIZED RESULTS FOR ZONE 4A**  
(3 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	32.0	37.7	35.7	29.8	27.8
Days from seeding to ripening.....	111.0	108.0	108.0	111.5	111.5
Plant height in inches.....	43.0	43.0	43.0	43.0	43.0
Straw strength (maximum of 10).....	8.5	8.9	8.4	8.4	7.7
Bushel weight in pounds.....	60.0	59.5	59.8	59.0	59.0
Commercial grades in percentage: 2 Nor.....	25.0	—	—	—	Durum Grades 2 C.W. —
3 Nor.....	50.0	50.0	25.0	—	3 C.W. 75.0
4 Nor.....	—	25.0	50.0	75.0	4 C.W. —
No. 5.....	25.0	25.0	25.0	25.0	5 C.W. —
No. 6.....	—	—	—	—	6 C.W. 25.0

No significant grain yield difference between varieties.

### Yield Performance During Recent Years—Zone 4A

Only three satisfactory tests were conducted in this Zone in 1953. Wide yield differences occurred between tests, and between varieties within tests. Because of these unusual variations a statistical analysis indicates that the differences in yield between the varieties are not significant, even though wide differences occurred in some cases.

**Selkirk** yielded well in 1953, its first year in Wheat Pool tests. As the results of one year's tests do not provide conclusive evidence, further tests will be conducted before any recommendations are made.

**S-250** also produced good results in this zone. Like **Selkirk**, this is its first year of testing. Recommendations will not be made until further information is available.

**Thatcher** placed third in 1953, although it has been the highest yielding variety in Zone 4A during fourteen of the past sixteen years. It is the only variety officially recommended for this zone.

Lee placed fourth in yield in 1953, and ranked fifth of five varieties in 1952. Over a four-year period, Lee has been outyielded consistently in this zone.

Nugget was fifth in yield in 1953. It placed fourth out of five varieties in 1952.

**TABLE No. 25.—SUMMARIZED RESULTS FOR ZONE 4B**  
(5 satisfactory tests)

	Thatcher	Selkirk	S-250	Lee	Nugget
Yield in bushels per acre.....	30.0	31.3	28.9	24.1	26.6
Days from seeding to ripening.....	99.3	100.0	101.3	101.8	103.3
Plant height in inches.....	29.0	29.0	31.4	29.4	28.0
Straw strength (maximum of 10).....	9.3	9.2	9.1	8.5	7.1
Bushel weight in pounds.....	63.3	62.0	62.7	62.0	61.8
					Durum Grades
Commercial grades in percentage: 2 Nor.....	17.0	—	17.0	—	2 C.W. —
3 Nor.....	33.0	33.0	17.0	—	3 C.W. 33.0
4 Nor.....	50.0	67.0	50.0	67.0	4 C.W. 67.0
No. 5.....	—	—	16.0	33.0	—

Necessary difference—2.6 bushels.

### Yield Performance During Recent Years—Zone 4B

Selkirk outyielded the other varieties in 1953, the differences being significant in the case of Nugget and Lee. Selkirk was developed specifically to meet the threat of stem rust race 15B, a disease which is not of importance in this region. Although Selkirk gave a good general performance during the past year, further tests will be required before recommendations are made for its use in this zone.

Thatcher ranked second in yield, exceeding Nugget and Lee by significant margins. During the past five years Thatcher has given higher average yields in this zone than any other variety. It is the only variety officially recommended.

S-250 placed third in yield in 1953. This is the first year it has been used in Wheat Pool tests.

Nugget placed fourth in yield in 1953, and was outyielded by all other varieties in 1952. Durum is an uncertain crop in this zone where the frost-free period is short. Although Nugget matures several days earlier than other durum varieties, it has been later than the bread wheats in these tests.

Lee was outyielded by all other varieties in this zone in 1953, and produced relatively low yields in the three previous years. It is not recommended in this zone.



Fred Petruic of Avonlea with some of the sheaves from his wheat test.

Table No. 26

## Individual Summarized Results of All Tests—Wheat

The results of all successful wheat tests are shown individually in the following table. The tests are listed in order of Wheat Pool districts and sub-districts. The zone in which each test was located is shown under the column headed "Cereal Variety Zone." Before consulting the following table the reader is advised to refer to the discussion on page 7, headed "Facts to be Remembered in Reading and Studying Results."

**Important**—It should be kept in mind that the results of a single test should not be used as the basis for the choice of a variety. A more reliable guide is the yield performance discussion in the summarization according to Cereal Variety Zones, which is based on a large number of tests conducted over a period of years.

## WHEAT POOL DISTRICT 1

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>BETTY C. CAVEN, GAINSBOROUGH</b>											
3A.....	1	1	A	Thatcher.....	28.4	96	36	—	57	3 Nor.	—
				Selkirk.....	26.1	99	36	—	57	3 Nor.	—
				S-250.....	25.1	99	36	—	58	3 Nor.	I.
				Lee.....	33.2	96	36	—	61	2 Nor.	I.
				Nugget.....	26.6	96	38	—	61	2 C.W.	—
Necessary difference—4.0 bushels.											
<b>MALCOLM D. ORSTED, FERTILE</b>											
3A.....	1	2	A	Thatcher.....	22.3	—	—	—	61	2 Nor.	I.
				Selkirk.....	26.2	—	—	—	61	2 Nor.	I.
				S-250.....	21.0	—	—	—	60	2 Nor.	I.
				Lee.....	25.1	—	—	—	63	2 Nor.	I.
				Nugget.....	20.9	—	—	—	62	2 C.W.	Stch.
Necessary Difference—1.4 bushels.											
<b>WAYNE C. WOOLFITT, AUBURNTON</b>											
3A.....	1	3	A	Thatcher.....	29.9	98	41	9.2	61	2 Nor.	I.
				Selkirk.....	47.5	100	42	10.0	63	2 Nor.	I.
				S-250.....	26.5	105	44	8.5	58	2 Nor.	I.
				Lee.....	34.7	101	42	8.0	63	2 Nor.	I.
				Nugget.....	26.2	101	41	6.0	59	3 C.W.	I.
Necessary difference—4.2 bushels.											
<b>WAYNE, E. KENDALL, BRYANT</b>											
2A.....	1	5	A	Thatcher.....	15.1	—	—	—	56	4 Nor.	—
				Selkirk.....	25.1	—	—	—	60	2 Nor.	I.
				S-250.....	14.3	—	—	—	56	4 Nor.	—
				Rescue.....	17.0	—	—	—	57	3 Nor.	—
				Chinook.....	17.8	—	—	—	59	2 Nor.	—
Necessary difference—4.3 bushels.											
<b>CORRINNE J. SWENSON, MIDALE</b>											
2A.....	1	6	A	Thatcher.....	19.3	102	33	9.0	57	3 Nor.	—
				Selkirk.....	26.9	104	32	8.8	59	3 Nor.	I.
				S-250.....	19.6	101	32	9.0	55	4 Spec.	—
				Rescue.....	21.4	103	32	8.8	56	4 Nor.	—
				Chinook.....	20.6	103	33	8.3	59	2 Nor.	—
Necessary difference—3.2 bushels.											
<b>WALLACE J. BLOCK, OUNGRE</b>											
2A.....	1	7	A	Thatcher.....	25.5	101	36	8.5	61	1 Nor.	—
				Selkirk.....	37.1	101	32	10.0	63	2 Nor.	I.
				S-250.....	23.4	101	42	9.0	60	2 Nor.	I.
				Rescue.....	35.0	102	37	9.5	61	1 Nor.	—
				Chinook.....	27.9	101	38	9.5	63	1 Nor.	—
Necessary difference—6.0 bushels.											
<b>MARY AND RANDALL GREER, WEYBURN</b>											
2A.....	1	8	A	Thatcher.....	5.9	—	—	—	(A)	2 N.(E)	—
				Selkirk.....	9.9	—	—	—	60	2 Nor.	I.
				S-250.....	4.4	—	—	—	(A)	2 N.(E)	—
				Rescue.....	9.2	—	—	—	58	2 Nor.	—
				Chinook.....	13.1	—	—	—	59	2 Nor.	—
Samples incomplete—Yields not used in Zone Summaries. (A)—Insufficient to calculate bushel weight. (E)—Estimated grade.											
<b>Tests Discarded on Account of Damage by Flooding, Pests, Hail, Drought or Other Causes</b>											
2A.....	1	4	A	James E. Miller, Bienfait.							

## WHEAT POOL DISTRICT 2

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>R. G. CRONE, RADVILLE</b>											
2A.....	2	1	A	Thatcher.....	25.0	—	28	—	62	2 Nor.	I.
				Selkirk.....	31.4	—	29	—	63	2 Nor.	D., G.
				S-250.....	23.2	—	31	—	60	2 Nor.	D., G.
				Rescue.....	23.2	—	29	—	63	2 Nor.	I.
				Chinook.....	26.2	—	29	—	64	1 Nor.	—
Necessary difference—2.8 bushels.											
<b>GILBERT VERBEURGT, CEYLON</b>											
2A.....	2	2	A	Thatcher.....	27.9	—	33	—	58	3 Nor.	I.
				Selkirk.....	36.1	—	36	—	61	3 Nor.	D., G.
				S-250.....	23.2	—	41	—	57	3 Nor.	—
				Rescue.....	24.7	—	42	—	59	2 Nor.	—
				Chinook.....	29.3	—	35	—	62	2 Nor.	I.
Necessary difference—2.4 bushels.											
<b>DAVID O. HAINSTOCK, HART</b>											
1A.....	2	3	A	Thatcher.....	40.1	—	41	9.0	62	1 Nor.	—
				Selkirk.....	40.0	—	37	10.0	62	2 Nor.	I.
				S-250.....	33.8	—	41	8.5	61	2 Nor.	—
				Rescue.....	34.3	—	41	8.0	61	1 Nor.	—
				Chinook.....	38.2	—	40	8.8	64	1 Nor.	—
Necessary difference—4.0 bushels.											
<b>ALBERT J. SALABA, ROCKGLEN</b>											
1C.....	2	4	A	Thatcher.....	27.2	—	—	—	59	2 Nor.	—
				Selkirk.....	32.1	—	—	—	57	3 Nor.	—
				S-250.....	23.8	—	—	—	58	2 Nor.	—
				Rescue.....	23.4	—	—	—	58	2 Nor.	—
				Chinook.....	28.1	—	—	—	61	1 Nor.	—
Necessary difference—2.9 bushels.											
<b>STEVE J. DAVEY, LONESOME BUTTE</b>											
1C.....	2	5	A	Thatcher.....	17.8	107	21	—	59	2 Nor.	—
				Selkirk.....	18.1	107	15	—	57	3 Nor.	—
				S-250.....	19.3	109	23	—	59	2 Nor.	—
				Rescue.....	16.4	107	13	—	60	2 Nor.	I.
				Chinook.....	21.9	108	18	—	63	1 Nor.	—
Necessary difference—2.7 bushels.											
<b>ALFRED BOND, MELAVAL</b>											
1A.....	2	6	A	Thatcher.....	18.3	—	—	—	62	2 Nor.	Bl.
				Selkirk.....	11.3	—	—	—	57	3 Nor.	—
				S-250.....	12.2	—	—	—	61	3 Nor.	I.
				Rescue.....	9.8	—	—	—	60	2 Nor.	Bl.
				Chinook.....	15.8	—	—	—	61	2 Nor.	Bl.
Yields not used in zone summary because of unusual fluctuations between replicates.											
<b>KENNETH WEERES, MAXSTONE</b>											
1A.....	2	7	A	Thatcher.....	13.0	—	30	9.5	59	2 Nor.	—
				Selkirk.....	14.8	—	28	9.8	59	2 Nor.	—
				S-250.....	10.7	—	31	9.5	59	2 Nor.	—
				Rescue.....	15.5	—	31	9.8	61	1 Nor.	—
				Chinook.....	14.4	—	30	9.8	63	1 Nor.	—
Test damaged—Yields not used in zone summary.											
<b>J. KEITH WARREN, OGEMA</b>											
1A.....	2	9	A	Thatcher.....	19.8	—	—	—	57	3 Nor.	—
				Selkirk.....	31.6	—	—	—	61	2 Nor.	I.
				S-250.....	15.7	—	—	—	56	4 Nor.	—
				Rescue.....	17.7	—	—	—	58	2 Nor.	—
				Chinook.....	23.0	—	—	—	61	2 Nor.	I.
Test damaged by wireworms—Yields not used in zone summary.											
<b>W. WAYNE CLEWS, FANGMAN</b>											
1A.....	2	10	A	Thatcher.....	38.8	109	36	7.8	61	2 Nor.	Bl.
				Selkirk.....	40.3	111	36	7.0	62	2 Nor.	I.
				S-250.....	33.9	111	39	7.3	61	2 Nor.	I.
				Rescue.....	34.3	110	37	9.0	62	2 Nor.	Bl.
				Chinook.....	33.9	109	38	8.3	63	1 Nor.	—
Necessary difference—4.0 bushels.											

## WHEAT POOL DISTRICT 3

<b>BEVERLEY R. HAMILTON, McCORD</b>											
1C.....	3	1	A	Thatcher.....	18.0	—	—	—	63	1 Nor.	—
				Selkirk.....	18.8	—	—	—	62	1 Nor.	—
				S-250.....	19.4	—	—	—	62	1 Nor.	—
				Rescue.....	17.9	—	—	—	63	1 Nor.	—
				Chinook.....	16.4	—	—	—	65	1 Nor.	—
No significant grain yield difference between varieties.											



# Wheat Pool District 3—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>ROMEO MORIN, FERLAND</b>											
1C.....	3	1	B	Thatcher.....	46.4	—	—	—	62	2 Nor.	Bl.
				Selkirk.....	45.0	—	—	—	62	3 Nor.	D., G.
				S-250.....	45.5	—	—	—	63	3 Nor.	D., G.
				Rescue.....	47.1	—	—	—	63	1 Nor.	—
				Chinook.....	48.7	—	—	—	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>MERVIN V. KLEIN, MANKOTA</b>											
1C.....	3	1	C	Thatcher.....	31.0	98	33	8.5	63	1 Nor.	—
				Selkirk.....	30.3	100	32	8.8	62	1 Nor.	—
				S-250.....	28.4	101	31	8.5	62	2 Nor.	D., G.
				Rescue.....	28.1	100	33	9.5	64	1 Nor.	—
				Chinook.....	32.6	99	34	9.5	65	1 Nor.	—
Necessary difference—1.6 bushels.											
<b>NORMAN ELLIS, RELIANCE</b>											
1C.....	3	2	A	Thatcher.....	26.8	98	21	8.3	64	1 Nor.	—
				Selkirk.....	29.1	98	20	9.0	63	1 Nor.	—
				S-250.....	25.9	102	24	8.5	62	1 Nor.	—
				Rescue.....	25.9	100	22	9.3	63	1 Nor.	—
				Chinook.....	25.9	98	21	9.3	65	1 Nor.	—
No significant grain yield difference between varieties.											
<b>LEROY A. WARDBERG, ROBSART</b>											
1C.....	3	5	A	Thatcher.....	14.6	101	22	9.7	63	2 Nor.	Bl.
				Selkirk.....	16.4	103	23	9.7	60	2 Nor.	Bl.
				S-250.....	9.7	103	22	9.5	61	2 Nor.	Bl.
				Rescue.....	10.2	103	21	9.7	63	1 Nor.	—
				Chinook.....	13.3	101	22	10.0	64	1 Nor.	—
Test damaged by wind—Yields not used in zone summary.											
<b>WILLIAM E. REYNOLDS, SENATE</b>											
1C.....	3	5	B	Thatcher.....	27.1	—	—	—	62	1 Nor.	—
				Selkirk.....	28.1	—	—	—	60	1 Nor.	—
				S-250.....	24.7	—	—	—	62	1 Nor.	—
				Rescue.....	25.3	—	—	—	63	1 Nor.	—
				Chinook.....	22.9	—	—	—	65	1 Nor.	—
Necessary difference—1.6 bushels.											
<b>BILLY VOLL, SHAUNAVON</b>											
1C.....	3	8	A	Thatcher.....	35.0	—	32	9.5	64	1 Nor.	—
				Selkirk.....	34.7	—	32	9.1	63	1 Nor.	—
				S-250.....	31.0	—	33	9.7	63	1 Nor.	—
				Rescue.....	29.0	—	32	9.4	65	1 Nor.	—
				Chinook.....	30.4	—	33	9.4	65	1 Nor.	—
Necessary difference—2.1 bushels.											
<b>FRED J. SUTTER, SHAUNAVON</b>											
1C.....	3	8	B	Thatcher.....	37.0	107	28	—	65	1 Nor.	—
				Selkirk.....	35.0	107	25	—	64	1 Nor.	—
				S-250.....	34.8	112	29	—	64	1 Nor.	—
				Rescue.....	34.0	109	28	—	65	1 Nor.	—
				Chinook.....	33.0	108	27	—	66	1 Nor.	—
No significant grain yield difference between varieties.											
<b>CARL R. KLEIN, ADMIRAL</b>											
1C.....	3	9	A	Thatcher.....	24.0	—	27	9.6	62	2 Nor.	Stch.
				Selkirk.....	20.6	—	26	9.4	61	2 Nor.	Stch.
				S-250.....	16.3	—	30	9.3	63	2 Nor.	Stch.
				Rescue.....	15.6	—	28	7.8	63	1 Nor.	—
				Chinook.....	21.6	—	28	7.8	64	1 Nor.	—
Necessary difference—1.2 bushels											
<b>JIM CROZIER, KINCAID</b>											
1C.....	3	10	A	Thatcher.....	28.4	—	—	—	62	2 Nor.	Bl.
				Selkirk.....	23.5	—	—	—	61	2 Nor.	I.
				S-250.....	19.4	—	—	—	63	2 Nor.	I.
				Rescue.....	22.6	—	—	—	63	1 Nor.	—
				Chinook.....	25.3	—	—	—	64	1 Nor.	—
Necessary difference—3.5 bushels.											
<b>Tests Discarded on Account of Damage by Flooding, Pests, Hall, Drought or Other Causes</b>											
1C.....	3	4	A	Henry A. Borman, Claydon.							

## WHEAT POOL DISTRICT 4

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>R. GEORGE WEDRICK, CARMICHAEL</b>											
1B.....	4	1	A	Thatcher.....	31.0	89	27	8.0	64	1 Nor.	—
				Selkirk.....	28.2	—	25	9.0	63	1 Nor.	—
				S-250.....	30.6	—	31	8.0	64	1 Nor.	—
				Rescue.....	28.6	—	29	7.0	65	1 Nor.	—
				Chinook.....	28.3	—	29	7.0	65	1 Nor.	—
Necessary difference—1.6 bushels.											
<b>THOMAS W. CARROLL, MAPLE CREEK</b>											
1B.....	4	2	A	Thatcher.....	16.5	112	—	—	64	1 Nor.	—
				Selkirk.....	17.2	91	—	—	61	1 Nor.	—
				S-250.....	16.5	90	—	—	63	1 Nor.	—
				Rescue.....	14.2	88	—	—	65	1 Nor.	—
				Chinook.....	16.5	92	—	—	66	1 Nor.	—
No significant grain yield difference between varieties.											
<b>CAROLYN J. STERN, WYMARK</b>											
2C.....	4	3	A	Thatcher.....	15.8	112	33	—	62	1 Nor.	—
				Selkirk.....	18.3	113	33	—	61	1 Nor.	—
				S-250.....	16.6	111	34	—	62	2 Nor.	I.
				Rescue.....	16.0	111	33	—	62	1 Nor.	—
				Chinook.....	18.1	111	33	—	63	1 Nor.	—
No significant grain yield difference between varieties.											
<b>EDWIN R. WALLACE, PENNANT</b>											
1B.....	4	5	A	Thatcher.....	31.9	—	—	—	62	1 Nor.	—
				Selkirk.....	30.3	—	—	—	60	2 Nor.	I.
				S-250.....	23.7	—	—	—	62	1 Nor.	—
				Rescue.....	23.5	—	—	—	63	1 Nor.	—
				Chinook.....	31.2	—	—	—	64	1 Nor.	—
Necessary difference—2.6 bushels.											
<b>ELLWOOD J. SAWBY, GOLDEN PRAIRIE</b>											
1B.....	4	6	A	Thatcher.....	27.9	96	29	9.3	63	1 Nor.	—
				Selkirk.....	29.0	95	29	6.5	60	1 Nor.	—
				S-250.....	26.9	95	28	8.7	61	1 Nor.	—
				Rescue.....	25.6	95	29	9.0	63	1 Nor.	—
				Chinook.....	29.4	94	29	8.7	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>HOWARD M. HASKELL, HORSHAM</b>											
1B.....	4	7	A	Thatcher.....	30.0	—	35	9.0	58	3 Nor.	I.
				Selkirk.....	27.8	—	34	9.0	53	4 Spec.	—
				S-250.....	26.3	—	34	9.2	57	3 Nor.	—
				Rescue.....	25.4	—	33	8.0	61	2 Nor.	I.
				Chinook.....	32.4	—	34	7.0	63	1 Nor.	—
Necessary difference—1.9 bushels.											
<b>DARYL W. SMITH, LEMSFORD</b>											
1A.....	4	9	A	Thatcher.....	26.0	—	—	—	64	1 Nor.	—
				Selkirk.....	24.4	—	—	—	62	2 Nor.	I.
				S-250.....	25.5	—	—	—	64	1 Nor.	—
				Rescue.....	26.6	—	—	—	64	1 Nor.	—
				Chinook.....	24.0	—	—	—	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>DON M. ANDERSON, HAZLET</b>											
1B.....	4	10	A	Thatcher.....	26.6	—	—	—	64	2 Nor.	S
				Selkirk.....	22.6	—	—	—	63	2 Nor.	Stch.
				S-250.....	22.4	—	—	—	63	2 Nor.	Stch.
				Rescue.....	26.8	—	—	—	64	2 Nor.	Stch.
				Chinook.....	26.8	—	—	—	65	1 Nor.	Stch.
No significant grain yield difference between varieties.											
<b>Tests Discarded on Account of Damage by Flooding, Pests, Hail, Drought or Other Causes</b>											
2C.....	4	4	A	Hubert R. White, Gull Lake.							
1B.....	4	8	A	H. Lloyd Russell, Estuary.							

## WHEAT POOL DISTRICT 5

<b>J. ALBERT CONNORS, PALMER</b>											
1A.....	5	1	A	Thatcher.....	20.0	—	—	—	63	1 Nor.	—
				Selkirk.....	19.7	—	—	—	61	2 Nor.	I.
				S-250.....	21.6	—	—	—	62	2 Nor.	I.
				Rescue.....	19.7	—	—	—	63	1 Nor.	—
				Chinook.....	20.7	—	—	—	65	1 Nor.	—
No significant grain yield difference between varieties.											

# Wheat Pool District 5—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>GERALD E. JACOB, ST. BOSWELLS</b>											
1A.....	5	2	A	Thatcher.....	28.7	—	30 <sup>1</sup>	7.0	63	2 Nor.	Stch.
				Selkirk.....	28.4	—	30	7.8	62	2 Nor.	1.
				S-250.....	26.7	—	32	7.5	63	2 Nor.	Stch.
				Rescue.....	30.9	—	32	7.0	63	1 Nor.	—
				Chinook.....	28.6	—	33	7.3	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>DALE L. FOWKE, NEVILLE</b>											
1A.....	5	3	A	Thatcher.....	24.2	—	30	6.8	60	2 Nor.	Bl.
				Selkirk.....	24.0	—	27	8.3	58	2 Nor.	—
				S-250.....	21.3	—	31	6.0	60	2 Nor.	Bl.
				Rescue.....	22.7	—	30	3.8	62	1 Nor.	—
				Chinook.....	23.9	—	32	6.3	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>LLOYD E. COWAN, WALDECK</b>											
1A.....	5	4	A	Thatcher.....	29.4	101	33	8.0	61	2 Nor.	Bl.
				Selkirk.....	29.3	101	32	8.0	59	2 Nor.	—
				S-250.....	22.9	104	36	7.7	59	2 Nor.	—
				Rescue.....	25.6	104	35	8.2	62	2 Nor.	Stch.
				Chinook.....	25.2	102	34	8.0	64	1 Nor.	—
Necessary difference—3.4 bushels.											
<b>GEORGE A. JOHNSON, BRADDOCK</b>											
.....	5	4	B	Thatcher.....	30.8	106	35	—	62	2 Nor.	1.
				Selkirk.....	27.8	105	34	—	60	2 Nor.	1.
				S-250.....	22.2	106	36	—	62	2 Nor.	1.
				Rescue.....	28.5	103	35	—	63	2 Nor.	1.
				Chinook.....	27.7	103	35	—	64	1 Nor.	—
Necessary difference—2.2 bushels.											
<b>GERHARD R. OELKE, HODGEVILLE</b>											
1A.....	5	5	A	Thatcher.....	12.6	92	17	—	57	3 Nor.	—
				Selkirk.....	9.3	97	16	—	52	5 Spec.	—
				S-250.....	10.2	93	16	—	56	4 Nor.	—
				Rescue.....	9.4	95	16	—	58	2 Nor.	—
				Chinook.....	12.8	94	17	—	60	1 Nor.	—
Necessary difference—1.6 bushels.											
<b>NYAL M. ARISS, CODERRE</b>											
1A.....	5	6	A	Thatcher.....	42.6	—	36	9.0	65	1 Nor.	—
				Selkirk.....	38.7	—	32	9.0	64	1 Nor.	—
				S-250.....	42.0	—	36	8.0	64	2 Nor.	Stch.
				Rescue.....	43.0	—	36	9.0	65	1 Nor.	—
				Chinook.....	44.8	—	36	9.0	65	1 Nor.	—
No significant grain yield difference between varieties.											
<b>FRANCIS G. MERCER, GRAYBURN</b>											
1A.....	5	7	A	Thatcher.....	28.4	—	—	—	64	1 Nor.	—
				Selkirk.....	28.4	—	—	—	64	1 Nor.	—
				S-250.....	21.8	—	—	—	64	1 Nor.	—
				Rescue.....	31.1	—	—	—	65	1 Nor.	—
				Chinook.....	31.6	—	—	—	65	1 Nor.	—
Test damaged—Yields not used in zone summary.											
<b>GLEN D. SMITH, BROWNLEE</b>											
B.....	5	8	A	Thatcher.....	30.4	—	—	—	62	2 Nor.	1.
				Selkirk.....	30.4	—	—	—	62	2 Nor.	1.
				S-250.....	30.2	—	—	—	60	3 Nor.	G., I.
				Rescue.....	32.4	—	—	—	60	2 Nor.	1.
				Chinook.....	31.2	—	—	—	64	2 Nor.	1.
No significant grain yield difference between varieties.											
<b>LILLIAN M. and ARTHUR L. NASH, EYEBROW</b>											
2B.....	5	8	B	Thatcher.....	22.6	92	31	9.0	64	2 Nor.	Stch.
				Selkirk.....	23.3	93	31	9.7	63	2 Nor.	1.
				S-250.....	21.6	95	33	9.0	63	2 Nor.	Stch.
				Rescue.....	26.1	95	32	10.0	64	1 Nor.	—
				Chinook.....	28.2	93	33	8.7	65	1 Nor.	—
Necessary difference—2.1 bushels.											
<b>LAWRENCE J. DRYSDALE, UREN</b>											
1A.....	5	9	A	Thatcher.....	37.9	94	27	—	64	2 Nor.	1.
				Selkirk.....	40.1	95	36	—	62	2 Nor.	1.
				S-250.....	33.9	95	36	—	63	2 Nor.	1.
				Rescue.....	31.3	95	35	—	63	2 Nor.	1.
				Chinook.....	32.8	94	37	—	65	1 Nor.	—
Necessary difference—3.3 bushels.											

# Wheat Pool District 5—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>MERVYN R. ELLINGSON, SECRETAN</b>											
1A.....	5	9	B	Thatcher.....	29.7	103	33	8.5	63	1 Nor.	—
				Selkirk.....	31.0	102	32	7.7	62	1 Nor.	—
				S-250.....	29.0	103	35	8.2	62	1 Nor.	—
				Rescue.....	26.4	102	33	10.0	63	1 Nor.	—
				Chinook.....	30.3	102	33	9.5	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>ERICK and ARTHUR HESCHEL, CALDERBANK</b>											
1A.....	5	10	A	Thatcher.....	29.2	—	30	9.5	63	2 Nor.	I.
				Selkirk.....	31.6	—	30	10.0	63	2 Nor.	I.
				S-250.....	25.2	—	34	10.0	63	2 Nor.	I.
				Rescue.....	28.9	—	33	8.0	64	2 Nor.	I.
				Chinook.....	25.7	—	34	9.0	64	2 Nor.	I.
Test damaged by hail—Yields not used in zone summary.											
<b>LEONARD LOEWEN, HERBERT</b>											
1A.....	5	10	B	Thatcher.....	27.8	—	—	5.0	63	1 Nor.	—
				Selkirk.....	26.8	—	—	9.0	61	2 Nor.	I.
				S-250.....	22.8	—	—	9.0	62	2 Nor.	I.
				Rescue.....	23.4	—	—	9.0	64	1 Nor.	—
				Chinook.....	27.0	—	—	10.0	65	1 Nor.	—
Necessary difference—1.5 bushels.											

# WHEAT POOL DISTRICT 6

<b>WILLIAM A. HARDER, LEWVAN</b>											
2E.....	6	1	A	Thatcher.....	17.2	—	—	—	56	4 Nor.	—
				Selkirk.....	32.2	—	—	—	59	4 Nor.	D., G.
				S-250.....	26.4	—	—	—	55	No. 5	—
				Rescue.....	21.1	—	—	—	56	4 Nor.	—
				Chinook.....	18.8	—	—	—	57	3 Nor.	—
Necessary difference—2.9 bushels.											
<b>ALVIN WESLOWSKI, DAVIN</b>											
2A.....	6	2	A	Thatcher.....	34.7	107	25	4.8	62	2 Nor.	I.
				Selkirk.....	46.2	105	30	6.3	62	3 Nor.	D., G.
				S-250.....	33.0	106	30	5.0	62	3 Nor.	D., G.
				Rescue.....	34.3	107	25	6.0	62	2 Nor.	I.
				Chinook.....	40.0	107	25	3.8	64	1 Nor.	—
Necessary difference—2.6 bushels.											
<b>HOWARD W. ROSS, MILESTONE</b>											
2E.....	6	3	A	Thatcher.....	35.0	—	—	—	63	3 Nor.	D., G.
				Selkirk.....	37.8	—	—	—	61	3 Nor.	D., G.
				S-250.....	23.7	—	—	—	61	4 Nor.	D., G.
				Rescue.....	24.0	—	—	—	62	3 Nor.	D., G.
				Chinook.....	24.4	—	—	—	63	3 Nor.	D., G.
Necessary difference—3.7 bushels.											
<b>FRED P. PETRUIC, AVONLEA</b>											
2E.....	6	4	A	Thatcher.....	24.4	—	25	9.7	63	1 Nor.	—
				Selkirk.....	25.8	—	24	9.7	62	1 Nor.	—
				S-250.....	25.0	—	26	9.5	63	2 Nor.	Stch.
				Rescue.....	23.5	—	26	9.5	64	1 Nor.	—
				Chinook.....	24.6	—	25	10.0	65	1 Nor.	—
No significant grain yield difference between varieties.											
<b>ROBERT W. OKERSTROM, ARCHIVE</b>											
1A.....	6	5	A	Thatcher.....	47.2	—	—	—	63	1 Nor.	—
				Selkirk.....	41.8	—	—	—	62	2 Nor.	I.
				S-250.....	37.9	—	—	—	63	2 Nor.	I.
				Rescue.....	35.8	—	—	—	63	1 Nor.	—
				Chinook.....	44.4	—	—	—	65	1 Nor.	—
Necessary difference—3.9 bushels.											
<b>KENNETH F. McKENZIE, BELBECK</b>											
2E.....	6	5	B	Thatcher.....	15.2	—	—	—	61	2 Nor.	I.
				Selkirk.....	16.8	—	—	—	63	2 Nor.	I.
				S-250.....	13.7	—	—	—	62	2 Nor.	I.
				Rescue.....	18.8	—	—	—	63	2 Nor.	I.
				Chinook.....	16.8	—	—	—	63	1 Nor.	—
Necessary difference—1.5 bushels.											
<b>RONALD R. KRAMER, EDENWOLD</b>											
3C.....	6	7	B	Thatcher.....	25.1	106	35	8.0	58	2 Nor.	—
				Selkirk.....	35.2	104	35	8.0	61	2 Nor.	I.
				S-250.....	24.3	105	39	7.8	58	2 Nor.	—
				Lee.....	30.3	107	33	7.3	62	2 Nor.	I.
				Nugget.....	25.1	107	36	3.0	59	3 C.W.	—
Necessary difference—2.5 bushels.											



# Wheat Pool District 6—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>WILLIAM D. HEENAN, GRAND COULEE</b>											
2E.....	6	7	C	Thatcher.....	25.0	91	30	8.0	59	2 Nor.	—
				Selkirk.....	32.2	91	27	9.0	62	1 Nor.	—
				S-250.....	25.6	93	33	7.0	57	3 Nor.	—
				Rescue.....	28.6	91	32	7.0	60	1 Nor.	—
				Chinook.....	27.9	93	31	7.0	62	1 Nor.	—
Necessary difference—3.3 bushels.											
<b>ARTHUR J. BLAKLEY, SINTALUTA</b>											
3C.....	6	8	A	Thatcher.....	41.9	—	—	9.0	61	2 Nor.	Bl.
				Selkirk.....	57.2	—	—	9.0	63	2 Nor.	I.
				S-250.....	39.7	—	—	9.0	61	2 Nor.	I.
				Lee.....	41.6	—	—	9.0	61	2 Nor.	I.
				Nugget.....	30.3	—	—	3.0	60	2 C.W.	—
Necessary difference—3.9 bushels.											
<b>W. BARRY STEVENSON, LORLIE</b>											
3C.....	6	9	A	Thatcher.....	25.9	—	—	—	60	3 Nor.	G.
				Selkirk.....	34.6	—	—	—	61	4 Nor.	D.,G.
				S-250.....	25.3	—	—	—	60	3 Nor.	G.
				Lee.....	29.6	—	—	—	61	4 Nor.	D.,G.
				Nugget.....	25.2	—	—	—	59	3 C.W.	—
Necessary difference—2.9 bushels.											
<b>EARL P. BEATTIE, TREGARVA</b>											
3E.....	6	10	A	Thatcher.....	23.3	—	—	—	56	4 Nor.	—
				Selkirk.....	23.5	—	—	—	60	2 Nor.	Bl.
				S-250.....	20.4	—	—	—	59	2 Nor.	—
				Rescue.....	21.2	—	—	—	57	3 Nor.	—
				Chinook.....	20.4	—	—	—	57	3 Nor.	—
No significant grain yield difference between varieties.											
<b>KENNETH G. KISTNER, DISLEY</b>											
2B.....	6	10	B	Thatcher.....	40.6	—	—	—	62	2 Nor.	I.
				Selkirk.....	41.8	—	—	—	62	3 Nor.	D.,G.
				S-250.....	35.6	—	—	—	61	3 Nor.	D.,G.
				Rescue.....	35.6	—	—	—	62	2 Nor.	I.
				Chinook.....	42.2	—	—	—	63	2 Nor.	Bl.
Necessary difference—2.2 bushels.											
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>											
2E.....	6	7	A	Warren Crofford, Regina.							

# WHEAT POOL DISTRICT 7

<b>ALPHONSE C. JAENEN, FAIRLIGHT</b>											
3A.....	7	1	A	Thatcher.....	15.5	110	40	10.0	60	3 Nor.	D., G.
				Selkirk.....	18.8	114	39	10.0	61	3 Nor.	D., G.
				S-250.....	14.6	112	43	9.7	60	3 Nor.	D., G.
				Lee.....	21.4	109	38	8.7	62	3 Nor.	D., G.
				Nugget.....	13.0	108	36	6.2	59	3 C.W.	—
Necessary difference—3.8 bushels.											
<b>L. JACK LEMOINE, MOOSOMIN</b>											
3B.....	7	2	A	Thatcher.....	19.5	89	38	10.0	58	3 Nor.	I.
				Selkirk.....	32.5	87	38	10.0	61	3 Nor.	I.
				S-250.....	19.1	90	40	10.0	59	3 Nor.	I.
				Lee.....	26.4	91	38	10.0	61	2 Nor.	I.
				Nugget.....	17.9	92	38	9.0	56	4 C.W.	—
Necessary difference—2.7 bushels.											
<b>DAVID F. GRIFFITH, VANDURA</b>											
3A.....	7	3	A	Thatcher.....	21.4	—	—	—	61	2 Nor.	I.
				Selkirk.....	25.2	—	—	—	62	2 Nor.	I.
				S-250.....	17.0	—	—	—	60	2 Nor.	I.
				Lee.....	26.2	—	—	—	62	2 Nor.	I.
				Nugget.....	17.8	—	—	—	59	3 C.W.	—
Necessary difference—3.6 bushels.											
<b>ALFRED C. PARKER, WINDTHORST</b>											
3A.....	7	4	A	Thatcher.....	21.9	99	44	10.0	59	2 Nor.	—
				Selkirk.....	41.9	98	39	10.0	62	2 Nor.	I.
				S-250.....	24.7	101	42	10.0	56	4 Nor.	—
				Lee.....	26.9	96	42	10.0	59	2 Nor.	—
				Nugget.....	10.1	100	42	9.0	51	6 C.W.	—
No significant grain yield difference between varieties.											

# Wheat Pool District 7—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>EDWARD J. DALEY, STOUGHTON</b>											
3A.....	7	5	A	Thatcher.....	24.9	107	44	10.0	61	2 Nor.	I.
				Selkirk.....	31.3	106	44	10.0	63	3 Nor.	D., G.
				S-250.....	21.0	112	45	9.2	59	3 Nor.	D., G.
				Lee.....	23.0	112	45	6.2	60	3 Nor.	D., G.
				Nugget.....	24.5	105	45	5.2	58	3 C.W.	—
Necessary difference—2.9 bushels.											
<b>C. DALE WIGGINS, FILLMORE</b>											
3A.....	7	5	B	Thatcher.....	12.3	118	34	9.3	53	No. 5	—
				Selkirk.....	27.6	118	36	10.0	60	3 Nor.	I.
				S-250.....	13.6	114	38	9.0	53	No. 5	—
				Lee.....	16.4	113	34	7.5	57	3 Nor.	—
				Nugget.....	11.5	112	37	8.0	52	6 C.W.	—
Necessary difference—3.7 bushels.											
<b>PETER J. THOLL, PEEBLES</b>											
3A.....	7	6	A	Thatcher.....	17.9	102	39	10.0	59	3 Nor.	D., G.
				Selkirk.....	30.6	102	40	10.0	61	3 Nor.	D., G.
				S-250.....	16.4	109	43	10.0	58	3 Nor.	D., G.
				Lee.....	16.0	102	36	3.0	58	4 Nor.	D., G.
				Nugget.....	2.5	102	40	2.0	46	Feed	—
Necessary difference—2.6 bushels.											
<b>R. JIM HOOD, WOLSELEY</b>											
3A.....	7	7	A	Thatcher.....	42.2	—	40	6.8	59	3 Nor.	I.
				Selkirk.....	59.8	—	42	7.0	62	2 Nor.	I.
				S-250.....	39.7	—	44	7.0	59	3 Nor.	I.
				Lee.....	46.8	—	36	4.0	59	3 Nor.	I.
				Nugget.....	35.5	—	40	3.0	55	5 C.W.	—
Necessary difference—3.3 bushels.											
<b>KENNETH D. HACK, ROCANVILLE</b>											
3B.....	7	8	A	Thatcher.....	44.7	114	35	7.3	62	2 Nor.	I.
				Selkirk.....	53.3	115	37	8.5	62	2 Nor.	I.
				S-250.....	45.9	115	39	9.0	61	2 Nor.	I.
				Lee.....	43.4	113	35	7.0	62	2 Nor.	I.
				Nugget.....	32.0	113	30	4.3	60	2 C.W.	—
Necessary difference—2.7 bushels.											
<b>DOUGLAS C. CLARKE, SPY HILL</b>											
3B.....	7	9	A	Thatcher.....	4.3	—	35	4.8	51	No. 6	—
				Selkirk.....	8.3	—	33	10.0	58	3 Nor.	D., G.
				S-250.....	8.4	—	36	9.0	53	No. 5	—
				Lee.....	13.7	—	33	8.5	56	4 Nor.	—
				Nugget.....	2.1	—	34	5.5	49	Feed	—
Plot damaged—Yields not used in zone summary.											
<b>A. GORDON KOCH, STOCKHOLM</b>											
3C.....	7	10	A	Thatcher.....	23.8	115	35	10.0	59	3 Nor.	I.
				Selkirk.....	33.0	117	42	10.0	62	3 Nor.	D., G.
				S-250.....	21.9	115	36	10.0	61	3 Nor.	D., G.
				Lee.....	27.4	112	35	10.0	62	3 Nor.	D., G.
				Nugget.....	20.4	115	34	5.0	59	3 C.W.	I.
Necessary difference—2.6 bushels.											
<b>HERBERT H. SMITH, LEMBERG</b>											
3C.....	7	11	A	Thatcher.....	26.0	113	43	7.2	58	3 Nor.	I.
				Selkirk.....	41.5	113	37	8.5	61	3 Nor.	D., G.
				S-250.....	18.7	113	45	7.5	54	No. 5	I.
				Lee.....	31.9	110	40	6.5	56	4 Nor.	—
				Nugget.....	14.8	110	45	3.2	45	Feed	—
Necessary difference—4.8 bushels.											

# WHEAT POOL DISTRICT 8

<b>JOE GERLACH, LANGENBURG</b>											
3B.....	8	1	A	Thatcher.....	31.1	—	46	10.0	59	4 Nor.	D., G.
				Selkirk.....	49.9	—	46	10.0	62	3 Nor.	D., G.
				S-250.....	28.2	—	46	9.0	59	3 Nor.	D., G.
				Lee.....	37.1	—	44	7.0	59	4 Nor.	D., G.
				Nugget.....	19.3	—	47	0.0	52	6 C.W.	—
Necessary difference—5.2 bushels.											

# Wheat Pool District 8—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>PATRICK ROONEY, SALTCOATS</b>											
3B.....	8	2	A	Thatcher.....	11.3	—	—	—	52	5 Spec.	—
				Selkirk.....	21.9	—	—	—	59	2 Nor.	—
				S-250.....	8.1	—	—	—	48	Feed	—
				Lee.....	15.3	—	—	—	54	4 Spec.	—
				Nugget.....	1.7	—	—	—	(A)	Feed (E)	—
Necessary difference—2.5 bushels.											

<b>MARVIN HALYK, BIRMINGHAM</b>											
3C.....	8	3	A	Thatcher.....	23.7	108	31	10.0	58	3 Nor.	I.
				Selkirk.....	43.8	107	25	9.0	62	3 Nor.	D., G.
				S-250.....	22.6	106	28	8.0	57	4 Nor.	D., G.
				Lee.....	27.9	107	23	6.0	60	3 Nor.	D., G.
				Nugget.....	20.1	108	30	10.0	54	5 C.W.	—
Necessary difference—3.7 bushels.											

<b>GEORGE E. LAZURKO, WILLOWBROOK</b>											
3C.....	8	4	A	Thatcher.....	13.7	—	—	—	60	3 Nor.	D., G.
				Selkirk.....	18.8	—	—	—	61	3 Nor.	G.
				S-250.....	15.2	—	—	—	60	3 Nor.	D., G.
				Lee.....	14.0	—	—	—	61	3 Nor.	G.
				Nugget.....	12.4	—	—	—	55	5 C.W.	—
No significant grain yield difference between varieties.											

<b>JOHNNY P. KALMAKOFF, KAMSACK</b>											
3B.....	8	5	A	Thatcher.....	28.8	115	39	8.0	62	3 Nor.	I.
				Selkirk.....	35.5	115	38	8.3	62	3 Nor.	I.
				S-250.....	27.1	117	40	8.0	61	3 Nor.	I.
				Lee.....	27.8	117	39	5.0	58	4 Nor.	D., G.
				Nugget.....	20.8	116	38	3.3	55	5 C.W.	—
Necessary difference—6.6 bushels.											

<b>JOHN N. SWETLESHNOFF, CANORA</b>											
3B.....	8	6	A	Thatcher.....	28.8	107	36	10.0	59	3 Nor.	I.
				Selkirk.....	42.5	109	41	10.0	62	3 Nor.	I.
				S-250.....	27.5	109	44	10.0	57	3 Nor.	—
				Lee.....	29.3	105	38	8.0	60	3 Nor.	I.
				Nugget.....	22.6	104	42	5.8	55	5 C.W.	—
Necessary difference—3.1 bushels.											

<b>FLORIAN B. NOVAKOWSKI, RAMA</b>											
3B.....	8	7	A	Thatcher.....	24.7	103	36	10.0	60	3 Nor.	D., G.
				Selkirk.....	20.6	103	37	10.0	61	3 Nor.	D., G.
				S-250.....	24.0	113	42	9.7	61	3 Nor.	D., G.
				Lee.....	22.9	110	37	9.0	61	3 Nor.	D., G.
				Nugget.....	23.5	107	36	7.7	59	3 C.W.	—
No significant grain yield difference between varieties.											

<b>ALEX GELETCHUK, RAMA</b>											
3C.....	8	7	C	Thatcher.....	16.2	108	39	7.8	56	4 Nor.	—
				Selkirk.....	28.8	108	38	9.0	59	3 Nor.	D., G.
				S-250.....	24.1	108	44	8.8	60	3 Nor.	D., G.
				Lee.....	15.3	107	36	6.5	56	4 Nor.	—
				Nugget.....	17.2	107	39	3.0	55	5 C.W.	—
Necessary difference—3.9 bushels.											

<b>DONALD W. SNODGRASS, STURGIS</b>											
3B.....	8	8	A	Thatcher.....	32.7	104	39	10.0	61	3 Nor.	I.
				Selkirk.....	46.6	106	40	10.0	63	3 Nor.	I.
				S-250.....	30.4	107	40	10.0	61	3 Nor.	I.
				Lee.....	32.0	105	38	8.3	61	3 Nor.	I.
				Nugget.....	21.6	104	38	7.0	56	4 C.W.	—
Necessary difference—4.0 bushels.											

<b>MAX DICK, ARRAN</b>											
3B.....	8	10	A	Thatcher.....	15.6	—	—	—	55	No. 5	—
				Selkirk.....	34.0	—	—	—	62	4 Nor.	D., G.
				S-250.....	17.7	—	—	—	54	4 Nor.	—
				Lee.....	19.7	—	—	—	58	4 Nor.	D., G.
				Nugget.....	5.5	—	—	—	49	Feed	—
Necessary difference—12.4 bushels.											

Tests discarded on account of damage by flooding, pests, hail, drought or other causes

3B.....	8	9	A	Gerald L. Anaka, Stenen.							
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(A) Insufficient to calculate bushel weight.

(E) Estimated grade.

# WHEAT POOL DISTRICT 9

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com- mercial grades	Grading remarks
<b>GERALD TKATCH, JASMIN</b>											
3C.....	9	1	A	Thatcher.....	15.0	—	42	10.0	60	3 Nor.	Bl., I.
				Selkirk.....	15.4	—	41	10.0	62	4 Nor.	F.
				S-250.....	9.2	—	43	10.0	60	4 Nor.	F.
				Lee.....	15.8	—	41	9.2	60	3 Nor.	I.
				Nugget.....	12.6	—	45	7.5	57	4 C.W.	—
Necessary difference—2.5 bushels.											
<b>STANLEY W. WALDEGGER, DYSART</b>											
3C.....	9	2	A	Thatcher.....	41.6	100	39	9.0	60	3 Nor.	I.
				Selkirk.....	45.7	100	37	10.0	62	4 Nor.	D., G.
				S-250.....	35.5	102	42	9.3	61	4 Nor.	D., G.
				Lee.....	44.4	100	39	4.0	60	4 Nor.	D., G.
				Nugget.....	36.9	99	40	5.0	58	4 C.W.	D., G.
Necessary difference—4.7 bushels.											
<b>GASPER ORBAN, PUNNICHY</b>											
3C.....	9	3	A	Thatcher.....	25.9	—	40	6.0	60	3 Nor.	I.
				Selkirk.....	39.3	—	38	7.0	62	3 Nor.	I.
				S-250.....	34.9	—	43	7.0	61	3 Nor.	I.
				Lee.....	21.1	—	40	8.0	59	4 Nor.	D., G.
				Nugget.....	17.0	—	44	6.0	58	4 C.W.	I.
Test damaged by hail—yields not used in zone summary.											
<b>LEONARD W. FISHER, SILTON</b>											
3C.....	9	4	A	Thatcher.....	46.2	109	42	8.5	63	2 Nor.	I.
				Selkirk.....	53.9	111	42	9.0	63	2 Nor.	I.
				S-250.....	41.5	110	43	9.3	63	2 Nor.	I.
				Lee.....	52.4	109	41	7.0	62	2 Nor.	I.
				Nugget.....	47.7	111	42	5.0	64	1 C.W.	—
Necessary difference—3.4 bushels.											
<b>DAVID J. McKAY, GOVAN</b>											
2B.....	9	5	A	Thatcher.....	45.7	—	36	6.8	61	2 Nor.	Bl.
				Selkirk.....	45.3	—	35	7.0	60	3 Nor.	I.
				S-250.....	32.1	—	36	7.5	61	3 Nor.	I.
				Rescue.....	32.5	—	34	6.3	61	1 Nor.	—
				Chinook.....	38.2	—	34	5.0	62	1 Nor.	—
Necessary difference—3.5 bushels.											
<b>ROBERT T. HALSTEAD, NOKOMIS</b>											
2B.....	9	6	A	Thatcher.....	39.4	101	37	6.8	63	2 Nor.	I.
				Selkirk.....	42.2	101	37	7.3	62	2 Nor.	I.
				S-250.....	41.3	101	40	9.0	63	2 Nor.	I.
				Rescue.....	41.5	100	41	9.0	63	1 Nor.	—
				Chinook.....	39.9	101	41	8.5	65	1 Nor.	—
No significant grain yield difference between varieties.											
<b>RONALD L. MORNINGSTAR, LOCKWOOD</b>											
2B.....	9	6	B	Thatcher.....	27.2	106	34	7.0	61	2 Nor.	Bl.
				Selkirk.....	23.0	109	32	5.0	61	2 Nor.	Stch.
				S-250.....	28.2	108	35	7.0	62	2 Nor.	Stch.
				Rescue.....	34.2	108	35	9.0	64	1 Nor.	—
				Chinook.....	29.8	107	37	7.0	64	2 Nor.	I.
Necessary difference—2.5 bushels.											
<b>H. EDWARD DENMAN, RAYMORE</b>											
3C.....	9	7	A	Thatcher.....	57.0	115	39	10.0	62	2 Nor.	I.
				Selkirk.....	66.7	117	39	10.0	62	3 Nor.	D., G.
				S-250.....	54.1	116	40	10.0	62	3 Nor.	D., G.
				Lee.....	59.1	116	39	9.0	63	3 Nor.	D., G.
				Nugget.....	53.7	116	42	7.0	62	3 C.W.	I.
Necessary difference—2.4 bushels.											
<b>ROBERT K. HAMILTON, LEROY</b>											
2B.....	9	8	A	Thatcher.....	20.4	—	—	—	61	2 Nor.	I.
				Selkirk.....	23.0	—	—	—	62	3 Nor.	I.
				S-250.....	25.7	—	—	—	62	3 Nor.	I.
				Rescue.....	26.0	—	—	—	62	2 Nor.	I.
				Chinook.....	19.6	—	—	—	63	2 Nor.	I.
No significant grain yield difference between varieties.											
<b>THOMAS COOPER, WEST BEND</b>											
3C.....	9	9	A	Thatcher.....	30.0	—	—	—	62	2 Nor.	G.
				Selkirk.....	40.6	—	—	—	63	3 Nor.	D., G.
				S-250.....	29.6	—	—	—	62	2 Nor.	G.
				Lee.....	34.5	—	—	—	62	3 Nor.	D., G.
				Nugget.....	24.6	—	—	—	58	4 C.W.	D., G.
Necessary difference—3.3 bushels.											

# Wheat Pool District 9—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>MERLE G. BEVILL, ELFROS</b>											
3C.....	9	10	A	Thatcher.....	41.8	119	47	8.8	62	3 Nor.	D., G.
				Selkirk.....	53.5	119	42	9.3	62	3 Nor.	D., G.
				S-250.....	42.8	119	46	8.3	62	3 Nor.	D., G.
				Lee.....	47.0	117	42	7.8	62	3 Nor.	D., G.
				Nugget.....	39.4	117	46	7.5	59	3 C.W.	—
Necessary difference—2.9 bushels.											

# WHEAT POOL DISTRICT 10

<b>JOSEPH A. BOEHM, HOLDFAST</b>											
2B.....	10	1	A	Thatcher.....	42.0	—	—	—	63	1 Nor.	—
				Selkirk.....	42.8	—	—	—	63	3 Nor.	D., G.
				S-250.....	38.1	—	—	—	61	3 Nor.	D., G.
				Rescue.....	38.8	—	—	—	64	2 Nor.	I.
				Chinook.....	39.5	—	—	—	64	2 Nor.	I.
No significant grain yield difference between varieties.											

<b>FRANKLYN A. STRAIN, LAWSON</b>											
2B.....	10	2	A	Thatcher.....	30.6	—	28	—	64	1 Nor.	—
				Selkirk.....	28.8	—	25	—	62	2 Nor.	I.
				S-250.....	27.7	—	29	—	63	2 Nor.	I.
				Rescue.....	24.3	—	26	—	64	1 Nor.	—
				Chinook.....	27.0	—	28	—	65	1 Nor.	—
Necessary difference—2.2 bushels.											

<b>JERRY B. BRAUN, BEECHY</b>											
1A.....	10	3	A	Thatcher.....	35.4	97	—	7.8	62	2 Nor.	I.
				Selkirk.....	30.5	96	—	8.8	61	3 Nor.	G., I.
				S-250.....	26.5	97	—	8.5	62	3 Nor.	G., I.
				Rescue.....	23.9	97	—	6.3	58	3 Nor.	G., I.
				Chinook.....	29.2	97	—	5.0	63	2 Nor.	I.
Necessary difference—5.7 bushels.											

<b>LLOYD SCHURY, BEECHY</b>											
1A.....	10	3	B	Thatcher.....	17.7	—	25	—	62	2 Nor.	I.
				Selkirk.....	18.3	—	23	—	60	3 Nor.	G., I.
				S-250.....	13.9	—	27	—	62	3 Nor.	G., I.
				Rescue.....	18.4	—	26	—	63	2 Nor.	I.
				Chinook.....	18.6	—	25	—	63	1 Nor.	—
Test damaged by hail—Yields not used in zone summary.											

<b>MARVIN L. BARTON, BOUNTY</b>											
2B.....	10	5	A	Thatcher.....	23.4	—	—	—	61	2 Nor.	Bl.
				Selkirk.....	26.1	—	—	—	58	2 Nor.	—
				S-250.....	24.3	—	—	—	59	2 Nor.	—
				Rescue.....	26.8	—	—	—	61	2 Nor.	Bl.
				Chinook.....	31.4	—	—	—	62	2 Nor.	Bl.
Necessary difference—3.9 bushels.											

<b>TERRY S. VEEMAN, TICHFIELD</b>											
1A.....	10	5	B	Thatcher.....	31.0	—	—	—	62	2 Nor.	Bl.
				Selkirk.....	32.3	—	—	—	62	2 Nor.	Stch.
				S-250.....	19.8	—	—	—	63	2 Nor.	Stch.
				Rescue.....	25.2	—	—	—	63	1 Nor.	—
				Chinook.....	25.3	—	—	—	64	1 Nor.	—
Necessary difference—2.3 bushels.											

<b>R. BRUCE MURRAY, BRATTON</b>											
2B.....	10	5	C	Thatcher.....	11.1	—	—	—	60	2 Nor.	Bl.
				Selkirk.....	5.7	—	—	—	59	3 Nor.	Bl., I.
				S-250.....	7.0	—	—	—	60	3 Nor.	Bl., I.
				Rescue.....	11.1	—	—	—	62	2 Nor.	Bl.
				Chinook.....	10.5	—	—	—	63	2 Nor.	Bl.
Test damaged—Yields not used in zone summary.											

<b>REX H. FRIEND, HAWARDEN</b>											
2B.....	10	6	A	Thatcher.....	34.8	94	32	4.5	63	2 Nor.	I.
				Selkirk.....	34.7	95	29	5.0	62	3 Nor.	D., G.
				S-250.....	39.3	95	31	4.2	62	2 Nor.	I.
				Rescue.....	38.7	94	30	8.2	64	2 Nor.	I.
				Chinook.....	37.3	94	31	8.0	65	2 Nor.	I.
No significant grain yield difference between varieties.											



# Wheat Pool District 10—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test desig- nation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>RALPH E. JOHNSON, DAVIDSON</b>											
2B.....	10	7	A	Thatcher.....	29.2	101	40	—	63	1 Nor.	—
				Selkirk.....	30.3	100	38	—	62	2 Nor.	I.
				S-250.....	27.8	100	40	—	62	2 Nor.	I.
				Rescue.....	27.6	99	40	—	62	1 Nor.	—
				Chinook.....	29.7	99	40	—	64	1 Nor.	—

No significant grain yield difference between varieties.

<b>DONALD R. ANDERSON, STALWART</b>											
2B.....	10	8	A	Thatcher.....	23.5	—	—	—	62	2 Nor.	Bl.
				Selkirk.....	22.2	—	—	—	62	3 Nor.	D., G.
				S-250.....	24.8	—	—	—	63	3 Nor.	D., G.
				Rescue.....	27.4	—	—	—	63	2 Nor.	I.
				Chinook.....	24.3	—	—	—	64	2 Nor.	Stch.

Necessary difference—2.6 bushels.

<b>C. WAYNE LOBERG, HANLEY</b>											
2B.....	10	9	A	Thatcher.....	5.9	—	—	—	60	2 Nor.	I.
				Selkirk.....	5.1	—	—	—	58	2 Nor.	—
				S-250.....	4.6	—	—	—	60	2 Nor.	I.
				Rescue.....	9.1	—	—	—	62	2 Nor.	I.
				Chinook.....	7.8	—	—	—	62	2 Nor.	I.

Test damaged by rain and hail—Yields not used in zone summary.

## Tests discarded on account of damage by flooding, pests, hail, drought or other causes

1D.....	10	4	A	Robert W. McConnell, Wiseton.
2B.....	10	7	B	Raymond D. Heinrich, Davidson.

# WHEAT POOL DISTRICT 11

<b>RICHARD F. ROGERS, FORGAN</b>											
1A.....	11	2	A	Thatcher.....	31.5	—	29	—	65	1 Nor.	—
				Selkirk.....	32.9	—	27	—	63	2 Nor.	I.
				S-250.....	28.2	—	31	—	64	1 Nor.	—
				Rescue.....	29.9	—	30	—	65	1 Nor.	—
				Chinook.....	30.6	—	29	—	65	1 Nor.	—

No significant grain yield difference between varieties.

<b>JAMES S. STUKINGS, MADISON</b>											
1D.....	11	3	A	Thatcher.....	38.0	—	—	—	65	1 Nor.	—
				Selkirk.....	36.3	—	—	—	63	1 Nor.	—
				S-250.....	33.1	—	—	—	63	1 Nor.	—
				Rescue.....	34.3	—	—	—	64	1 Nor.	—
				Chinook.....	30.2	—	—	—	65	1 Nor.	—

Necessary difference—1.9 bushels.

<b>RONALD C. HAY, ROSETOWN</b>											
1D.....	11	7	A	Thatcher.....	47.0	—	—	—	64	1 Nor.	—
				Selkirk.....	44.6	—	—	—	62	1 Nor.	—
				S-250.....	41.7	—	—	—	63	3 Nor.	D., G.
				Rescue.....	41.4	—	—	—	65	1 Nor.	—
				Chinook.....	42.6	—	—	—	65	1 Nor.	—

No significant grain yield difference between varieties.

<b>JOHN A. COCHRANE, ROSETOWN</b>											
1D.....	11	7	B	Thatcher.....	18.9	—	—	—	62	1 Nor.	—
				Selkirk.....	21.7	—	—	—	61	2 Nor.	I.
				S-250.....	15.4	—	—	—	62	1 Nor.	—
				Rescue.....	21.2	—	—	—	63	1 Nor.	—
				Chinook.....	21.5	—	—	—	64	1 Nor.	—

Samples badly shattered during shipment—Yields not used in zone summary.

<b>RONALD G. FOX, RUTHILDA</b>											
2D.....	11	8	A	Thatcher.....	27.7	—	—	—	64	1 Nor.	—
				Selkirk.....	25.7	—	—	—	64	1 Nor.	—
				S-250.....	23.4	—	—	—	64	1 Nor.	—
				Rescue.....	24.0	—	—	—	65	1 Nor.	—
				Chinook.....	24.2	—	—	—	66	1 Nor.	—

Necessary difference—2.4 bushels.

# Wheat Pool District 11—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>ROBERT P. SPROULE, COLEVILLE</b>											
1D.....	11	9	A	Thatcher.....	38.8	—	—	—	64	1 Nor.	—
				Selkirk.....	35.3	—	—	—	63	2 Nor.	I.
				S-250.....	32.8	—	—	—	62	2 Nor.	I.
				Rescue.....	30.5	—	—	—	64	1 Nor.	—
				Chinook.....	32.1	—	—	—	65	1 Nor.	—

No significant grain yield difference between varieties.

<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>											
1D.....	11	1	A	R. Donald Gillespie, Kyle.							
1D.....	11	4	A	Marvin M. Nunweiler, LaPorte.							
1D.....	11	5	A	Jack B. Robertson, Merid.							
1D.....	11	8	B	L. Robert Mutlow, McGee.							
1D.....	11	10	A	Hughie M. Hawkins, Hoosier.							

# WHEAT POOL DISTRICT 12

<b>ELEANORE H. ITTERMAN, OBAN</b>											
2D.....	12	1	A	Thatcher.....	17.5	109	—	7.5	62	2 Nor.	I.
				Selkirk.....	12.0	112	—	7.0	61	2 Nor.	I.
				S-250.....	13.9	113	—	8.0	63	2 Nor.	I.
				Rescue.....	12.5	110	—	9.0	62	2 Nor.	I.
				Chinook.....	12.4	110	—	8.0	63	2 Nor.	I.

Necessary difference—2.4 bushels.

<b>NEIL O. FORREST, TRAYNOR</b>											
2D.....	12	2	A	Thatcher.....	9.3	—	18	9.0	61	3 Nor.	G.
				Selkirk.....	8.5	—	15	10.0	59	3 Nor.	G.
				S-250.....	7.8	—	18	10.0	60	3 Nor.	G.
				Rescue.....	7.6	—	19	9.8	60	3 Nor.	G.
				Chinook.....	9.6	—	18	10.0	63	3 Nor.	G.

Necessary difference—1.2 bushels.

<b>FRED L. BEIRNES, RUTHILDA</b>											
2D.....	12	3	A	Thatcher.....	13.7	—	—	—	61	3 Nor.	G., I.
				Selkirk.....	13.9	—	—	—	58	3 Nor.	G., I.
				S-250.....	12.4	—	—	—	58	3 Nor.	G., I.
				Rescue.....	12.9	—	—	—	58	3 Nor.	G., I.
				Chinook.....	13.4	—	—	—	59	3 Nor.	G., I.

Test badly damaged by hail—Yields not used in zone summary.

<b>BILLY H. SOPYC, TAKO</b>											
2D.....	12	5	A	Thatcher.....	18.7	110	26	8.3	63	3 Nor.	D., G.
				Selkirk.....	20.8	108	24	8.0	62	3 Nor.	D., G.
				S-250.....	23.7	109	27	8.2	62	3 Nor.	D., G.
				Rescue.....	26.3	110	27	8.5	63	3 Nor.	D., G.
				Chinook.....	18.8	110	24	8.5	65	2 Nor.	I.

Test damaged—Yields not used in zone summary.

<b>ADAM R. BROST, MACKLIN</b>											
2D.....	12	6	A	Thatcher.....	21.4	99	16	4.8	61	2 Nor.	I.
				Selkirk.....	22.2	99	15	5.0	59	3 Nor.	I.
				S-250.....	20.0	99	16	5.8	61	3 Nor.	I.
				Rescue.....	19.1	101	16	8.8	63	1 Nor.	—
				Chinook.....	19.1	101	17	9.0	64	1 Nor.	—

Test damaged by wind—Yields not used in zone summary.

<b>CYRIL SAWTELL, FREEMONT</b>											
3E.....	12	8	A	Thatcher.....	29.9	114	28	9.8	63	3 Nor.	D., G.
				Selkirk.....	30.3	113	28	10.0	63	3 Nor.	D., G.
				S-250.....	29.1	111	31	10.0	64	2 Nor.	I.
				Lee.....	22.2	112	28	10.0	60	4 Nor.	F.
				Nugget.....	24.7	110	30	7.8	62	4 C.W.	F.

Necessary difference—1.3 bushels.

<b>HOWARD M. BARNSLEY, RIVERCOURSE, ALTA.</b>											
3E.....	12	8	B	Thatcher.....	67.6	104	37	9.0	63	3 Nor.	G.
				Selkirk.....	67.2	107	34	9.0	63	4 Nor.	D., G.
				S-250.....	64.4	106	38	8.5	63	4 Nor.	D., G.
				Lee.....	55.6	110	38	7.3	59	4 Nor.	D., G.
				Nugget.....	47.4	105	39	6.5	59	4 C.W.	D., G.

Necessary difference—6.4 bushels.

<b>GERALD M. MILLER, ROCKHAVEN</b>											
2D.....	12	9	A	Thatcher.....	13.3	—	—	—	61	3 Nor.	D., G.
				Selkirk.....	16.3	—	—	—	61	3 Nor.	D., G.
				S-250.....	17.7	—	—	—	61	3 Nor.	D., G.
				Rescue.....	15.9	—	—	—	62	3 Nor.	D., G.
				Chinook.....	14.9	—	—	—	63	3 Nor.	D., G.

No significant grain yield difference between varieties.

# Wheat Pool District 12—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per meas-ured bushel	Com-mercial grades	Grading remarks
<b>D. KEITH BULLERWELL, OUTKNIFE</b>											
3E.....	12	9	B	Thatcher.....	16.8	103	21	9.2	63	4 Nor.	D., G., F.
				Selkirk.....	18.0	104	22	9.2	63	4 Nor.	D., G., F.
				S-250.....	17.2	104	22	10.0	64	4 Nor.	D., G., F.
				Lee.....	12.9	105	20	9.7	60	No. 6	B.F.
				Nugget.....	12.8	104	21	8.5	61	5 C.W.	B.F.
Necessary difference—2.1 bushels.											
<b>GUY R. LACOURSIERE, HIGHGATE</b>											
3G.....	12	10	A	Thatcher.....	30.7	—	34	—	63	3 Nor.	D., G.
				Selkirk.....	29.7	—	35	—	62	3 Nor.	D., G.
				S-250.....	27.2	—	34	—	62	3 Nor.	D., G.
				Lee.....	26.9	—	34	—	61	3 Nor.	D., G.
				Nugget.....	22.2	—	34	—	61	3 C.W.	D., G.
No significant grain yield difference between varieties.											
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>											
1D.....	12	4	A	Gerald T. Wolokoff, Superb.							
2D.....	12	7	A	Robert J. Cooper, Senlac.							

# WHEAT POOL DISTRICT 13

<b>WILBERT S. ANDERSON, YOUNG</b>											
2B.....	13	2	A	Thatcher.....	23.3	—	—	—	61	2 Nor.	Bl.
				Selkirk.....	22.4	—	—	—	57	3 Nor.	—
				S-250.....	23.4	—	—	—	60	2 Nor.	I.
				Rescue.....	19.7	—	—	—	61	2 Nor.	I.
				Chinook.....	20.9	—	—	—	63	2 Nor.	Bl.
No significant grain yield difference between varieties.											
<b>ARTHUR J. CALLAGHAN, BLUCHER</b>											
2B.....	13	4	A	Thatcher.....	19.3	—	23	7.0	61	2 Nor.	I.
				Selkirk.....	18.2	—	24	8.3	58	3 Nor.	I.
				S-250.....	18.2	—	28	8.8	59	3 Nor.	I.
				Rescue.....	15.1	—	27	8.0	62	2 Nor.	I.
				Chinook.....	15.9	—	27	9.0	62	2 Nor.	I.
Test damaged by birds—Yields not used in zone summary.											
<b>PAUL JANZEN, OSLER</b>											
2B.....	13	5	A	Thatcher.....	20.8	—	17	8.8	62	2 Nor.	Bl.
				Selkirk.....	20.4	—	19	9.8	61	2 Nor.	I.
				S-250.....	21.9	—	22	9.8	62	2 Nor.	I.
				Rescue.....	21.0	—	20	8.8	63	1 Nor.	—
				Chinook.....	19.5	—	20	9.5	64	1 Nor.	—
No significant grain yield difference between varieties.											
<b>ERNEST MISKOLCZI, PRUD'HOMME</b>											
2B.....	13	8	A	Thatcher.....	37.8	96	—	8.8	64	3 Nor.	D., G.
				Selkirk.....	39.8	96	—	9.0	62	3 Nor.	D., G.
				S-250.....	35.4	96	—	9.0	63	3 Nor.	D., G.
				Rescue.....	31.1	96	—	8.5	64	3 Nor.	D., G.
				Chinook.....	31.9	96	—	8.8	65	3 Nor.	D., G.
Samples incomplete—Yields not used in zone summary.											
<b>J. LARRY NEUFELD, ABERDEEN</b>											
2B.....	13	8	B	Thatcher.....	21.9	102	25	7.8	61	2 Nor.	Bl.
				Selkirk.....	21.6	101	26	9.4	59	2 Nor.	—
				S-250.....	20.9	103	24	8.9	62	2 Nor.	I.
				Rescue.....	16.7	102	24	9.0	62	2 Nor.	I.
				Chinook.....	22.6	102	25	8.3	64	1 Nor.	—
Necessary difference—1.7 bushels.											
<b>WALTER LABRASH, TOTZKE</b>											
2B.....	13	9	A	Thatcher.....	24.3	91	—	—	65	3 Nor.	D., G.
				Selkirk.....	27.0	91	—	—	64	3 Nor.	D., G.
				S-250.....	27.7	91	—	—	64	3 Nor.	D., G.
				Rescue.....	20.2	92	—	—	64	3 Nor.	D., G.
				Chinook.....	23.9	91	—	—	66	2 Nor.	I.
Necessary difference—2.1 bushels.											
<b>HENRY K. BAUTZ, MIDDLE LAKE</b>											
4A.....	13	10	A	Thatcher.....	58.0	101	—	9.0	63	3 Nor.	D., G.
				Selkirk.....	62.8	96	—	8.8	62	3 Nor.	D., G.
				S-250.....	61.4	96	—	8.8	63	4 Nor.	F.
				Lee.....	51.8	104	—	8.8	61	4 Nor.	F.
				Nugget.....	54.2	104	—	8.5	63	3 C.W.	F.
Necessary difference—3.4 bushels.											

# Wheat Pool District 13—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>ALLAN DOEPKER, ANNAHEIM</b>											
3C.....	13	11	A	Thatcher.....	9.1	—	—	—	55	No. 5	—
				Selkirk.....	15.6	—	—	—	59	No. 5	F.
				S-250.....	9.0	—	—	—	53	No. 5	—
				Lee.....	17.7	—	—	—	56	No. 5	F.
				Nugget.....	7.0	—	—	—	54	5 C.W.	—

Necessary difference—2.2 bushels.

# WHEAT POOL DISTRICT 14

<b>LAWRENCE R. PARKER, SILVER PARK</b>											
3F.....	14	3	A	Thatcher.....	23.1	—	—	8.0	63	3 Nor.	G., Stch.
				Selkirk.....	23.4	—	—	8.0	62	3 Nor.	G., Stch.
				S-250.....	19.6	—	—	8.0	63	3 Nor.	G., Stch.
				Lee.....	18.7	—	—	8.0	63	4 Nor.	D., G., F.
				Nugget.....	9.5	—	—	6.5	64	4 C.W.	D., G. Stch.

Necessary difference—4.5 bushels.

<b>ROSELLA E. DUSENER, McKAGUE</b>											
4A.....	14	4	A	Thatcher.....	25.7	—	—	—	60	2 Nor.	Bl.
				Selkirk.....	29.9	—	—	—	59	3 Nor.	F.
				S-250.....	25.3	—	—	—	60	3 Nor.	D., G.
				Lee.....	25.3	—	—	—	59	4 Nor.	D., G., F.
				Nugget.....	19.5	—	—	—	61	3 C.W.	G.

Necessary difference—4.7 bushels.

<b>FAYE C. DAHL, DAHLTON</b>											
3C.....	14	4	C	Thatcher.....	41.1	—	—	9.0	63	2 Nor.	I.
				Selkirk.....	48.9	—	—	9.0	62	3 Nor.	D., G.
				S-250.....	42.9	—	—	9.0	62	4 Nor.	F.
				Lee.....	44.3	—	—	2.0	61	4 Nor.	F.
				Nugget.....	35.3	—	—	2.0	61	4 C.W.	F.

Necessary difference—5.3 bushels.

<b>FRANK GLEESON, KINLOCH</b>											
4A.....	14	5	A	Thatcher.....	12.3	121	43	8.0	57	No. 5	D., G., F.
				Selkirk.....	20.5	120	43	9.0	57	No. 5	D., G., F.
				S-250.....	20.4	120	43	8.0	56	No. 5	D., G., F.
				Lee.....	12.2	119	43	8.0	57	No. 5	D., G., F.
				Nugget.....	9.8	119	43	6.8	53	6 C.W.	—

Necessary difference—4.5 bushels.

<b>RONALD H. HIRTLE, NOBLEVILLE</b>											
4A.....	14	5	B	Thatcher.....	11.9	—	—	—	60	3 Nor.	D., G.
				Selkirk.....	14.9	—	—	—	60	4 Nor.	F.
				S-250.....	12.8	—	—	—	60	4 Nor.	F.
				Lee.....	9.9	—	—	—	59	4 Nor.	F.
				Nugget.....	9.3	—	—	—	59	3 C.W.	F.

Test damaged—Yields not used in zone summary.

<b>ALVIN R. TOUET, CARRAGANA</b>											
3F.....	14	6	A	Thatcher.....	28.7	—	—	—	61	3 Nor.	D., G.
				Selkirk.....	35.9	—	—	—	60	3 Nor.	D., G.
				S-250.....	32.2	—	—	—	61	3 Nor.	D., G.
				Lee.....	24.8	—	—	—	59	4 Nor.	F.
				Nugget.....	25.8	—	—	—	58	3 C.W.	—

Necessary difference—3.5 bushels.

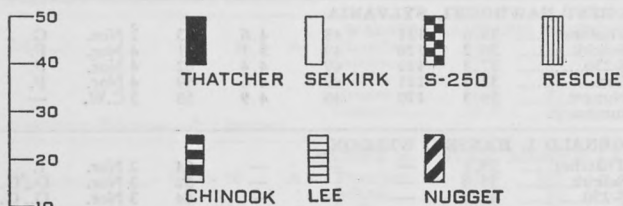
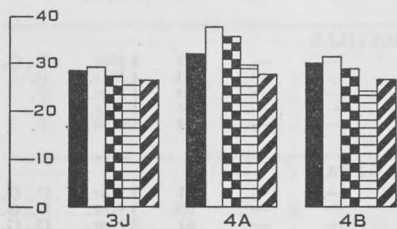
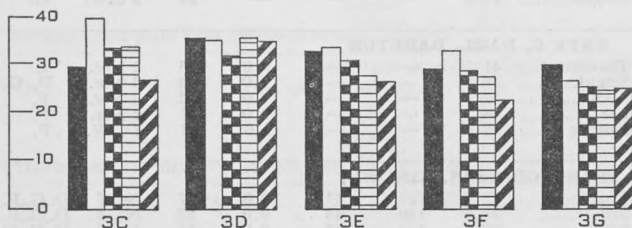
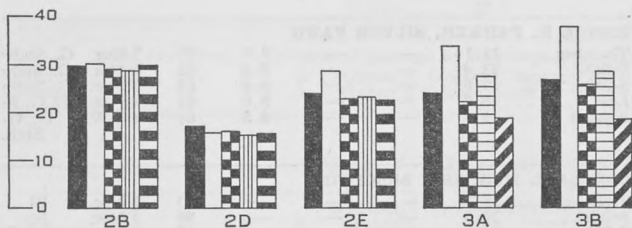
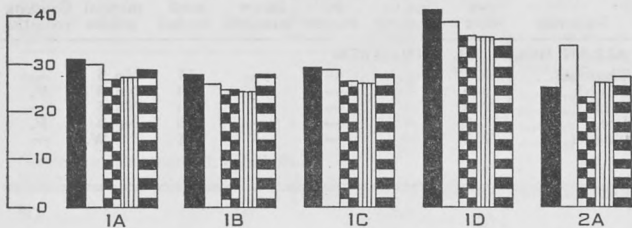
<b>OREST NAWROCKI, SYLVANIA</b>											
3F.....	14	7	A	Thatcher.....	35.6	121	48	4.6	63	2 Nor.	G.
				Selkirk.....	36.2	120	49	5.1	61	4 Nor.	F.
				S-250.....	37.2	120	49	4.4	62	4 Nor.	F.
				Lee.....	32.4	121	49	4.6	59	4 Nor.	F.
				Nugget.....	38.3	120	48	4.9	58	3 C.W.	—

Test damaged—Yields not used in zone summary.

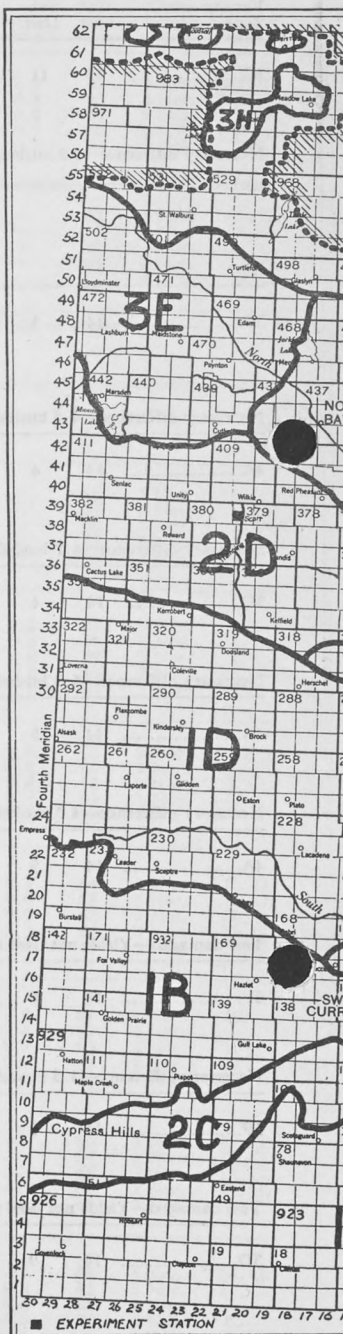
<b>GERALD I. HANSEN, WELDON</b>											
3D.....	14	9	A	Thatcher.....	35.1	—	—	—	64	2 Nor.	I.
				Selkirk.....	35.8	—	—	—	62	3 Nor.	D., G.
				S-250.....	32.4	—	—	—	64	3 Nor.	D., G.
				Lee.....	33.1	—	—	—	62	3 Nor.	D., G.
				Nugget.....	26.2	—	—	—	63	3 C.W.	D., G.

Necessary difference—3.2 bushels.

# HISTOGRAMS SHOWING COMPARATIVE WHEAT YIELDS

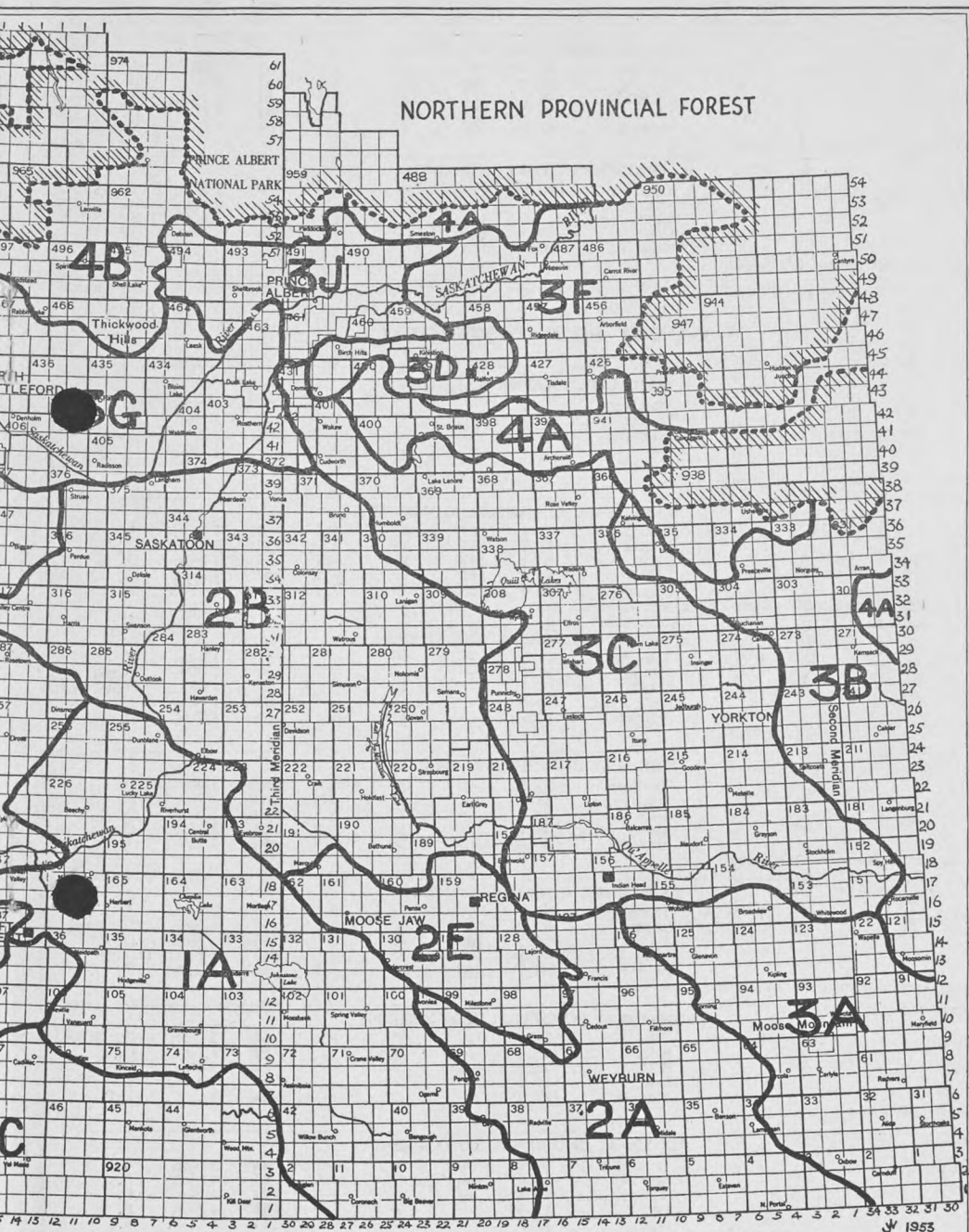


SCALE IN BUSHELS





# Cereal Variety Zones of Saskatchewan



# Wheat Pool District 14—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test design- nation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>MILES PRITCHARD, RUNCIMAN</b>											
3F.....	14	10	A	Thatcher.....	54.5	95	35	6.8	63	2 Nor.	I.
				Selkirk.....	56.5	96	34	8.3	62	3 Nor.	D., G.
				S-250.....	48.7	102	37	6.5	62	2 Nor.	I.
				Lee.....	53.2	98	33	5.8	61	3 Nor.	D., G.
				Nugget.....	42.2	100	37	1.5	58	4 C.W.	D., G.
Necessary difference—4.2 bushels.											
<b>GEORGE W. IHLE, NIPAWIN</b>											
3F.....	14	11	A	Thatcher.....	11.2	107	—	7.5	59	3 Nor.	I.
				Selkirk.....	15.8	109	—	8.8	56	4 Nor.	—
				S-250.....	12.8	109	—	8.5	58	3 Nor.	I.
				Lee.....	13.0	109	—	8.4	60	3 Nor.	I.
				Nugget.....	10.9	106	—	5.4	59	3 C.W.	I.
Necessary difference—1.5 bushels.											

# WHEAT POOL DISTRICT 15

<b>HARRY R. BASTNESS, HAGEN</b>											
3D.....	15	2	A	Thatcher.....	27.2	—	32	10.0	63	2 Nor.	I.
				Selkirk.....	27.6	—	32	9.0	62	2 Nor.	I.
				S-250.....	23.7	—	35	9.0	63	2 Nor.	I.
				Lee.....	30.7	—	32	8.0	63	3 Nor.	D., G.
				Nugget.....	32.3	—	30	8.0	63	3 C.W.	D., G.
Necessary difference—4.6 bushels.											
<b>HARVEY N. STALWICK, DOMREMY</b>											
3D.....	15	2	B	Thatcher.....	43.1	114	33	9.3	63	2 Nor.	I.
				Selkirk.....	41.7	115	31	9.8	63	3 Nor.	D., G.
				S-250.....	38.1	117	36	9.5	63	3 Nor.	D., G.
				Lee.....	42.4	117	33	9.5	62	3 Nor.	D., G.
				Nugget.....	46.3	116	35	7.3	64	2 C.W.	I.
No significant grain yield difference between varieties.											
<b>JOHN A. ZACHARIAS, ROSTHERN</b>											
3C.....	15	4	A	Thatcher.....	15.4	—	18	—	62	3 Nor.	D., G.
				Selkirk.....	13.1	—	15	—	62	3 Nor.	D., G.
				S-250.....	14.1	—	16	—	63	3 Nor.	D., G.
				Lee.....	10.0	—	14	—	62	4 Nor.	F.
				Nugget.....	10.3	—	17	—	63	4 C.W.	F.
Necessary difference—2.2 bushels.											
<b>KEN A. WILLOUGHBY, CAMEO</b>											
3J.....	15	6	A	Thatcher.....	33.5	—	27	8.3	63	3 Nor.	D., G.
				Selkirk.....	31.1	—	27	8.3	63	3 Nor.	D., G.
				S-250.....	30.4	—	27	8.5	64	3 Nor.	D., G.
				Lee.....	29.2	—	28	8.8	63	3 Nor.	D., G.
				Nugget.....	28.9	—	26	7.3	64	2 C.W.	I.
Necessary difference—2.3 bushels.											
<b>LAWRENCE COLLINS, ORMEAUX</b>											
4B.....	15	7	A	Thatcher.....	56.8	97	36	10.0	64	2 Nor.	I.
				Selkirk.....	62.0	100	36	10.0	63	3 Nor.	D., G.
				S-250.....	56.7	100	40	10.0	63	3 Nor.	D., G.
				Lee.....	49.5	102	36	10.0	63	4 Nor.	D., G.
				Nugget.....	58.7	100	36	5.0	63	3 C.W.	D., G.
Necessary difference—4.3 bushels.											
<b>RICHARD S. SCHMALZ, SHELLBROOK</b>											
3J.....	15	8	A	Thatcher.....	23.5	—	25	—	64	3 Nor.	D., G.
				Selkirk.....	23.6	—	24	—	64	3 Nor.	D., G.
				S-250.....	24.1	—	28	—	65	3 Nor.	D., G.
				Lee.....	17.3	—	25	—	63	4 Nor.	F.
				Nugget.....	21.3	—	27	—	64	3 C.W.	B.P.
Necessary difference—2.3 bushels.											
<b>FLOYD A. CROWLEY, NORTHSIDE</b>											
4B.....	15	9	A	Thatcher.....	16.3	—	—	—	63	3 Nor.	F.
				Selkirk.....	16.0	—	—	—	63	4 Nor.	F.
				S-250.....	17.2	—	—	—	64	4 Nor.	F.
				Lee.....	13.2	—	—	—	62	4 Nor.	F.
				Nugget.....	15.3	—	—	—	63	4 C.W.	F.
No significant grain yield difference between varieties.											

# Wheat Pool District 15—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bus. per acre	Days seed-ing to ripening	Plant height in inches	Straw strength	Lbs. per measured bushel	Com-mercial grades	Grading remarks
<b>JACK G. HAY, SHIPMAN</b>											
3J.....	15	11	A	Thatcher.....	28.5	—	—	—	60	3 Nor.	D., G.
				Selkirk.....	32.7	—	—	—	60	3 Nor.	D., G.
				S-250.....	27.3	—	—	—	60	3 Nor.	D., G.
				Lee.....	29.6	—	—	—	59	4 Nor.	F.
				Nugget.....	28.4	—	—	—	60	3 C.W.	D., G.
Necessary difference—2.3 bushels.											

# WHEAT POOL DISTRICT 16

<b>RONALD O. TKATCH, HAFFORD</b>											
3G.....	16	2	A	Thatcher.....	54.3	120	33	7.3	63	3 Nor.	F.
				Selkirk.....	48.6	120	31	9.3	63	3 Nor.	F.
				S-250.....	44.8	120	33	9.8	63	3 Nor.	F.
				Lee.....	45.8	119	37	9.8	62	4 Nor.	F.
				Nugget.....	51.6	119	31	8.5	63	4 C.W.	F.

Necessary difference—3.6 bushels.

<b>WILLIAM R. WOODWARD, NORTH BATTLEFORD</b>											
3G.....	16	3	A	Thatcher.....	18.6	—	—	—	62	3 Nor.	D., G.
				Selkirk.....	14.6	—	—	—	59	4 Nor.	D., G.
				S-250.....	13.4	—	—	—	62	4 Nor.	D., G.
				Lee.....	14.8	—	—	—	61	4 Nor.	D., G.
				Nugget.....	14.3	—	—	—	64	2 C.W.	I, J

Necessary difference—2.3 bushels.

<b>WILFRED L. BLANCHETTE, VAWN</b>											
3E.....	16	4	A	Thatcher.....	29.1	—	33	7.0	63	3 Nor.	D., G.
				Selkirk.....	29.3	—	32	6.5	62	3 Nor.	D., G.
				S-250.....	29.5	—	34	8.5	63	3 Nor.	D., G.
				Lee.....	26.5	—	33	8.3	62	4 Nor.	F.
				Nugget.....	22.6	—	32	7.0	62	4 C.W.	F.

Necessary difference—3.8 bushels.

<b>KENNY A. GARRETT, PAYNTON</b>											
3E.....	16	5	A	Thatcher.....	40.4	—	—	—	62	3 Nor.	D., G.
				Selkirk.....	45.6	—	—	—	61	3 Nor.	D., G.
				S-250.....	29.2	—	—	—	62	3 Nor.	D., G.
				Lee.....	39.9	—	—	—	62	3 Nor.	D., G.
				Nugget.....	39.0	—	—	—	63	2 C.W.	I.

Necessary difference—6.0 bushels.

<b>JIM W. TOWNLEY-SMITH, LASHBURN</b>											
3E.....	16	6	A	Thatcher.....	29.7	—	—	—	63	2 Nor.	I.
				Selkirk.....	30.5	—	—	—	62	3 Nor.	D., G.
				S-250.....	32.5	—	—	—	63	3 Nor.	D., G.
				Lee.....	23.4	—	—	—	61	4 Nor.	F.
				Nugget.....	23.3	—	—	—	61	3 C.W.	D., G.

Necessary difference—4.3 bushels.

<b>JOHNNY R. LEER, BUTTE ST. PIERRE</b>											
3E.....	16	7	A	Thatcher.....	23.9	—	31	10.0	63	3 Nor.	G.
				Selkirk.....	23.6	—	31	10.0	62	3 Nor.	G.
				S-250.....	21.2	—	31	10.0	62	3 Nor.	G.
				Lee.....	17.2	—	32	10.0	62	3 Nor.	G.
				Nugget.....	13.6	—	32	10.0	64	3 C.W.	G.

Test damaged—Yields not used in zone summary.

<b>SHIRLEY A. GEORGE, MERVIN</b>											
3E.....	16	8	A	Thatcher.....	21.5	90	27	10.0	61	4 Nor.	F.
				Selkirk.....	25.4	88	27	10.0	62	4 Nor.	F.
				S-250.....	21.6	90	29	10.0	62	4 Nor.	F.
				Lee.....	17.3	93	25	10.0	58	No. 5	D., G., F.
				Nugget.....	20.5	90	30	9.0	61	4 C.W.	F.

Necessary difference—2.8 bushels.

<b>DALE R. HUNTER, SPRUCE LAKE</b>											
3E.....	16	8	B	Thatcher.....	25.4	—	—	—	62	4 Nor.	D., G.
				Selkirk.....	21.4	—	—	—	59	4 Nor.	D., G.
				S-250.....	20.9	—	—	—	58	No. 6	F.
				Lee.....	22.5	—	—	—	53	Feed	F.
				Nugget.....	21.2	—	—	—	56	4 C.W.	F.

No significant grain yield difference between varieties.

# **Wheat Pool District 16—Continued**

Cereal Variety Zone	Dist.	Sub- Dist.	Test design- ation	Varieties	Yield bus. per acre	Days seed- ing to ripening	Plant height in inches	Straw strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>GEORGE W. ABBOTT, GLASLYN</b>											
4B.....	16	9	A	Thatcher.....	29.4	106	20	10.0	64	4 Nor.	F.
				Selkirk.....	28.0	106	20	10.0	62	4 Nor.	F.
				S-250.....	27.5	107	21	10.0	62	4 Nor.	F.
				Lee.....	22.3	104	23	8.0	60	No. 5	D., G., F.
				Nugget.....	20.5	105	22	10.0	61	3 C.W.	F.
Necessary difference—2.1 bushels.											
<b>GLEN J. AND BUD B. BACHELDER, MULLINGAR</b>											
4B.....	16	10	A	Thatcher.....	27.2	91	28	10.0	63	4 Nor.	F.
				Selkirk.....	30.1	91	32	9.0	62	4 Nor.	F.
				S-250.....	25.4	93	36	9.0	62	No. 5	D., G., F.
				Lee.....	18.6	94	28	8.0	61	No. 5	D., G., F.
				Nugget.....	21.4	97	29	4.0	61	4 C.W.	F.
Necessary difference—3.8 bushels.											
<b>CRESTON J. STORY, RANGER</b>											
4B.....	16	10	B	Thatcher.....	8.6	103	21	10.0	63	3 Nor.	F.
				Selkirk.....	9.3	103	20	10.0	60	3 Nor.	F.
				S-250.....	8.1	105	21	10.0	62	2 Nor.	D., G.
				Lee.....	7.9	107	22	10.0	62	4 Nor.	F.
				Nugget.....	5.1	111	17	9.8	59	4 C.W.	F.
Test damaged by hail—Yields not used in zone summary.											
<b>LAWRENCE A. BISHOP, SOUTH MAKWA</b>											
4B.....	16	11	A	Thatcher.....	20.2	—	39	6.5	63	4 Nor.	F.
				Selkirk.....	20.4	—	37	7.0	62	4 Nor.	F.
				S-250.....	17.6	—	39	6.5	63	4 Nor.	F.
				Lee.....	16.9	—	38	6.5	64	4 Nor.	F.
				Nugget.....	17.0	—	37	6.5	64	4 C.W.	F.
No significant grain yield difference between varieties.											

## BARLEY TESTS

A total of 101 barley tests were conducted during 1953. The varieties tested were **Vantage**, **Husky**, **Harlan**, **Titan**, **Balder** and **Hannchen**. Only four of these were included in each test. **Vantage** and **Husky** were used in all tests throughout the province. **Harlan** and **Titan** are most suited to the open prairie region (Zones 1A to 2E)\* and were used in the tests in that area. **Balder** and **Hannchen** were used in the parkland and wood area (Zones 3A to 4B).\*

### Description of Varieties

**Vantage** is a six-rowed, smooth awned variety which is medium-late and has medium strong straw. It is resistant to stem rust but is susceptible to leaf rust, loose smut and covered smut. It is eligible for the feed grades only. **Vantage** was developed at the Brandon Experimental Farm from the cross (Newal X Peatland) X Plush.

**Husky** is a new six-rowed, smooth awned, yellow aleurone barley. It is medium late maturing and has straw of medium strength. It is resistant to stem rust, moderately susceptible to leaf rust, moderately resistant to covered smut but susceptible to loose smut. It is eligible for feed grades only. **Husky** was developed at the University of Saskatchewan from the cross ((Peatland x Regal) x O.A.C. 21) x Newall. It was licensed in 1952.

**Harlan** is a six-rowed, rough awned variety which is resistant to shattering and lodging. It has produced good yields under irrigation conditions in Alberta. **Harlan** is resistant to covered and false loose smuts, stripe and bacterial blight, but is susceptible to rusts and true loose smut. **Harlan** is eligible for feed grades only. It was originated by the U.S. Department of Agriculture.

**Titan** is a six-rowed, smooth awned variety which is early maturing and has strong straw. It is susceptible to stem and leaf rust, moderately resistant to covered smut and susceptible to loose smut. It is eligible for feed grades only. **Titan** was originated at the University of Alberta from the cross Trebi X Glabron.

**Balder** is a two-rowed Swedish variety which is not yet licensed in Canada. It is late maturing, has mid-short, mid-strong straw, and mid-strong neck strength. Because it is not yet licensed, no grading standards have been set for this variety. However, for testing purposes it is considered to be comparable to **Hannchen** in quality.

**Hannchen** is a two-rowed, rough awned, late maturing variety, which has short, weak straw but it is reasonably satisfactory for straight combining. It is susceptible to stem and leaf rust and loose and covered smut. It is eligible for the top two-row grades. **Hannchen** originated in Sweden by selection from the variety **Hanna**.

### GRAIN YIELD

Zones 1A to 2E. An average of all tests in these zones indicates that **Vantage** was high in yield, although the differences between this variety and **Harlan** and **Husky** were of a minor nature. **Vantage** and **Harlan** each placed first in yield in two zones, second in three, and third in one. **Husky** was top yielder in two zones, placed third in three zones, and fourth in one area. With the one exception of Zone Group 2A and 2E, the yield differences between these three varieties were not significant. In Zone Group 2A and 2E both **Harlan** and **Vantage** significantly outyielded **Husky**. **Titan** was outyielded by all other varieties in every zone except the 2A and 2E group.

Zones 3A to 4B. On an average basis, **Husky** outyielded the other varieties in this group of zones. It placed first in five zones, second in two and third in one. Its best comparative performance came in Zone 3C where **Husky** outyielded all other varieties by significant differences. A comparison between the two six-rowed varieties in the test shows that **Husky** outyielded **Vantage** in six of the eight zone groups of this area. **Vantage** placed second in yield on an average basis. Its best performance came in Zone 3G where it outyielded all other varieties. **Balder** placed third

\*See Cereal Variety Zone Map, page 41.



on an average basis but the yield differences between this variety and Vantage were significant in only one zone. Hannchen was outyielded by all other varieties in six of the eight zones. A comparison between the two-rowed varieties in the test shows that Balder outyielded Hannchen in all but one zone.

TABLE No. 27—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal** Variety Zone	No. of Satisfactory Tests	Vantage	Husky	Harlan	Titan	Balder	Hannchen	Necessary Difference* in bushels
1A.....	6	53.3	49.5	52.1	47.4	—	—	5.39
1B and 1C.....	4	55.7	53.6	56.0	53.2	—	—	8.14
1D.....	4	61.0	67.1	61.7	58.9	—	—	N.S.
2A and 2E.....	4	57.2	50.1	58.8	54.0	—	—	6.33
2B.....	8	56.4	51.9	52.6	44.7	—	—	5.52
2D.....	3	36.0	36.5	34.2	32.6	—	—	11.66
3A.....	6	54.5	64.6	—	—	46.4	40.5	11.43
3B.....	4	51.8	56.9	—	—	52.4	43.7	N.S.
3C.....	6	54.9	63.4	—	—	54.2	44.2	6.32
3D and 3F.....	2	47.3	46.2	—	—	48.7	40.2	8.63
3E.....	5	67.9	71.8	—	—	62.9	55.4	5.83
3G.....	3	59.6	56.2	—	—	39.9	46.3	12.65
3J.....	4	48.4	53.5	—	—	53.9	49.5	N.S.
4A and 4B.....	5	49.8	61.9	—	—	55.2	47.6	7.17

\* **Necessary Difference.**—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. "Necessary difference" is a statistical measurement of these differences. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables, little confidence can be placed in the superiority of one variety over another in that particular zone group.

N.S.—No significant grain yield difference between varieties.

Note.—There were no satisfactory tests in zone 2C.

\*\* See zone map, page. 41.

#### Past Performance and Official Recommendations

**Vantage** has gained considerable popularity since it was introduced for commercial production in 1948. It was top yielder in the open prairie region in both 1952 and 1953 but was outyielded by Husky in the parkland and wooded region in the three years 1951 to 1953. Because of its record over the past number of years, Vantage is officially recommended in every zone in the province, with the exception of 1B, 1C and 2C.

**Husky** has been included in Wheat Pool tests for three years and has produced outstanding yields, particularly in the parkland and wooded region. During 1953 it was top yielder in five, and second in two, of the eight zone groups in this region. This record is supported by its performance in 1951 and 1952. In addition to its yielding ability in this area, Husky has performed well in Wheat Pool tests in the open prairie region, although it averaged slightly lower than Vantage in yield during 1952 and 1953. Husky is now officially recommended in Zones 2A, 2B, 2D, 3A, 3B, 3C and 3F. Tests are still being carried on to determine its adaptability in other zones.

**Harlan** was included in Wheat Pool tests for the second year in 1953. It is recommended for irrigated areas in Alberta and has shown good results during the past two years in the open prairie region of Saskatchewan. This variety is still being tested prior to any official recommendations being made.

**Titan** was outyielded by the other varieties in all but one zone in the prairie region of Saskatchewan in 1953. It was outyielded by the other varieties in 1952. Titan has been removed from the official recommendations for a number of zones in recent years but is still recommended in Zones 1A, 1B, 1C, 2A, 2C and 2E because of its past performance under dry conditions.

**Balder** was tested by the Wheat Pool for the first time in 1953. It was outyielded on an average basis by Husky and Vantage but in Zones 3D, 3F and 3J it placed first in yield. Balder is a two-rowed variety and a direct comparison between this variety and Hannchen is therefore of particular interest. During the past season Balder outyielded Hannchen in seven of the eight zone groups in which these two varieties were tested.

**Hannchen** was outyielded by all other varieties in six zones, and placed third in the two remaining zones during 1953. Hannchen was tested previously

by the Wheat Pool in 1950, and it averaged lower in yield than Vantage at that time. Hannchen is officially recommended as the best high quality two-rowed variety for use in Zones 3D and 3F.

HISTOGRAMS SHOWING BARLEY YIELDS BY CEREAL VARIETY ZONES

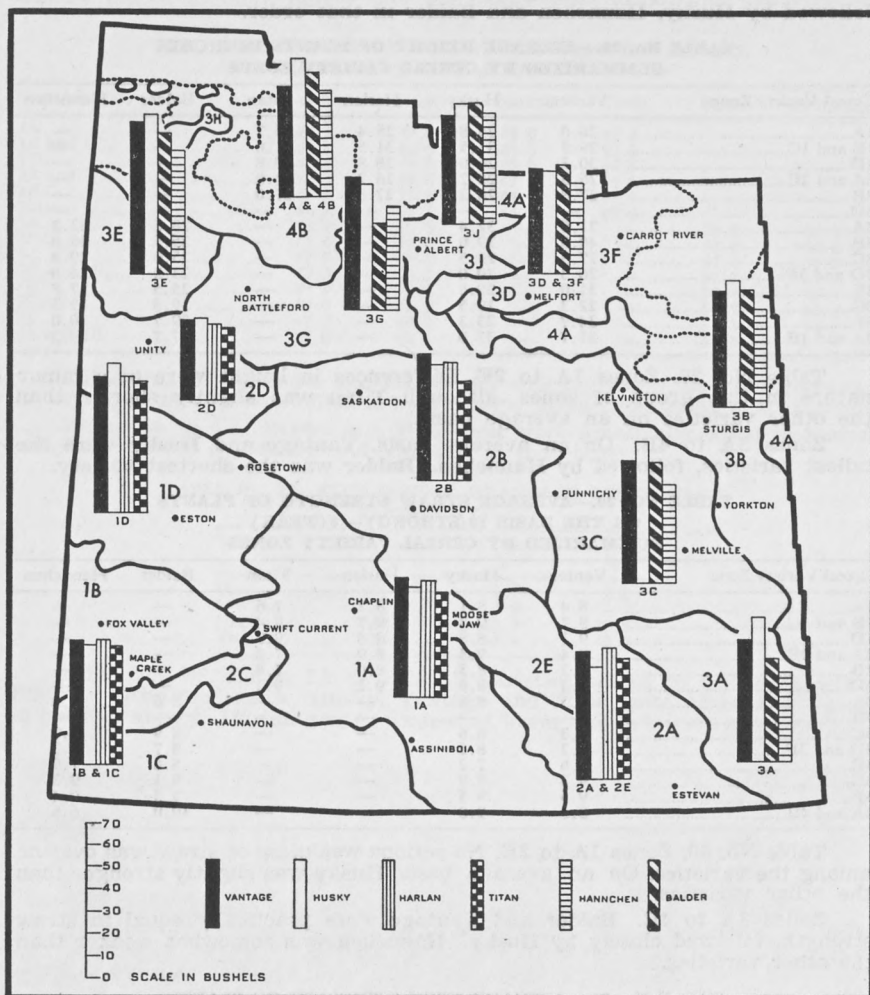


TABLE No. 28.—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	Husky	Harlan	Titan	Balder	Hannchen
1A.....	94.6	95.3	94.6	91.6	—	—
1B and 1C.....	102.0	100.0	96.5	96.0	—	—
1D.....	96.8	98.0	94.3	94.0	—	—
2A and 2E.....	93.7	96.0	91.3	89.0	—	—
2B.....	93.3	93.5	90.8	92.3	—	—
2D.....	—	—	—	—	—	—
3A.....	89.3	90.5	—	—	90.3	91.3
3B.....	80.5	82.5	—	—	83.5	83.0
3C.....	95.5	99.5	—	—	101.0	99.0
3D and 3F.....	94.7	97.3	—	—	99.3	99.0
3E.....	98.0	98.5	—	—	99.5	99.0
3G.....	98.7	99.3	—	—	101.0	99.0
3J.....	97.0	98.0	—	—	99.0	98.0
4A and 4B.....	97.5	98.5	—	—	98.5	98.5

Table No. 28. Zones 1A to 2E. On an average basis **Titan** was the earliest ripening variety, followed by **Harlan**, **Vantage** and **Husky** in that order.

Zones 3A to 4B. **Vantage** ripened earlier than the other varieties, followed by **Husky**, **Hannchen** and **Balder** in that order.

TABLE No. 28.—AVERAGE HEIGHT OF PLANTS IN INCHES  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	Husky	Harlan	Titan	Balder	Hannchen
1A.....	26.0	25.8	25.4	25.2	—	—
1B and 1C.....	29.5	31.5	31.5	31.0	—	—
1D.....	30.3	26.0	28.8	28.8	—	—
2A and 2E.....	26.3	28.2	26.2	24.0	—	—
2B.....	27.8	28.3	27.8	27.0	—	—
2D.....	—	—	—	—	—	—
3A.....	31.6	32.4	—	—	28.6	32.2
3B.....	40.5	39.0	—	—	35.5	38.0
3C.....	27.5	29.5	—	—	25.0	29.8
3D and 3F.....	26.3	29.0	—	—	23.3	26.0
3E.....	31.0	29.5	—	—	25.5	27.8
3G.....	22.3	19.5	—	—	19.8	19.5
3J.....	34.7	33.3	—	—	29.7	30.0
4A and 4B.....	31.7	32.0	—	—	27.7	29.3

Table No. 29. Zones 1A to 2E. Differences in height were of a minor nature in this group of zones, although **Titan** was slightly shorter than the other varieties on an average basis.

Zones 3A to 4B. On an average basis, **Vantage** and **Husky** were the tallest varieties, followed by **Hannchen**. **Balder** was the shortest variety.

TABLE NO. 30.—AVERAGE STRAW STRENGTH OF PLANTS  
ON THE BASIS 10 (STRONG) — 0 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	Husky	Harlan	Titan	Balder	Hannchen
1A.....	8.4	8.1	8.2	7.6	—	—
1B and 1C.....	8.7	9.3	9.7	9.4	—	—
1D.....	9.1	8.8	8.8	9.3	—	—
2A and 2E.....	8.4	9.3	8.9	7.2	—	—
2B.....	8.2	8.3	8.0	7.8	—	—
2D.....	9.3	8.9	9.2	9.3	—	—
2A.....	8.3	8.8	—	—	—	7.9
3A.....	—	—	—	—	—	—
3B.....	—	—	—	—	—	—
3C.....	8.3	8.6	—	—	8.9	7.7
3D and 3F.....	9.2	8.5	—	—	8.7	7.3
3E.....	8.6	7.2	—	—	6.6	7.9
3G.....	9.3	8.9	—	—	9.1	9.3
3J.....	9.5	9.5	—	—	9.3	9.4
4A and 4B.....	8.5	9.0	—	—	10.0	6.6

Table No. 30. Zones 1A to 2E. No serious weakness of straw was evident among the varieties. On an average basis **Husky** was slightly stronger than the other varieties.

Zones 3A to 4B. **Balder** and **Vantage** were practically equal in straw strength, followed closely by **Husky**. **Hannchen** was somewhat weaker than the other varieties.

TABLE No. 31.—AVERAGE NECK STRENGTH OF PLANTS  
BASIS 1 (STRONG), 2 (MEDIUM), 3 (WEAK)  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	Husky	Harlan	Titan	Balder	Hannchen
1A.....	1.7	2.0	1.8	1.8	—	—
1B and 1C.....	1.7	1.6	1.9	1.1	—	—
1D.....	1.3	2.3	1.7	1.3	—	—
2A and 2E.....	1.6	1.6	1.6	1.6	—	—
2B.....	2.2	2.6	2.0	2.2	—	—
2D.....	1.6	2.5	1.6	1.5	—	—
3A.....	1.6	1.9	—	—	2.3	2.1
3B.....	1.6	1.0	—	—	2.0	1.9
3C.....	1.5	1.5	—	—	1.8	1.8
3D and 3F.....	1.4	1.7	—	—	2.7	2.8
3E.....	1.8	2.1	—	—	2.0	2.2
3G.....	1.8	2.3	—	—	1.9	2.0
3J.....	1.3	1.6	—	—	2.3	1.9
4A and 4B.....	1.5	1.5	—	—	1.0	1.0

Table No. 31. Zones 1A to 2E. An average of all tests indicated that **Titan** was slightly superior in neck strength. **Harlan** and **Vantage** were practically equal, followed by **Husky**.

Zones 3A to 4B. **Vantage** was superior in neck strength in most zones. **Husky** placed second. **Balder** and **Hannchen** were practically equal.

TABLE No. 32.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Vantage	Husky	Harlan	Titan	Balder	Hannchen
1A.....	49.3	49.0	44.0	49.4	—	—
1B and 1C.....	50.3	50.8	45.5	50.3	—	—
1D.....	48.5	49.8	46.0	46.5	—	—
2A and 2E.....	48.3	48.6	42.1	45.6	—	—
2B.....	48.7	50.4	44.0	47.3	—	—
2D.....	49.7	50.3	43.0	48.0	—	—
3A.....	49.2	50.5	—	—	50.3	50.2
3B.....	47.6	50.4	—	—	51.0	50.6
3C.....	47.7	49.1	—	—	51.4	51.8
3D and 3F.....	47.3	46.7	—	—	52.7	53.3
3E.....	49.4	50.8	—	—	52.4	52.4
3G.....	50.0	52.5	—	—	53.5	53.8
3J.....	47.3	48.3	—	—	53.3	53.0
4A and 4B.....	45.0	48.0	—	—	51.3	51.0

Table No. 32. Zones 1A and 2E. **Husky** was highest in bushel weight on an average basis. It was followed by **Vantage**, **Titan** and **Harlan** in that order.

Zones 3A to 4B. **Balder** and **Hannchen** were practically equal in bushel weight, followed by **Husky** and **Vantage** in that order.

TABLE No. 33.—COMMERCIAL GRADES IN PERCENTAGE  
(ZONES 1A TO 2E)

Variety	1 Feed %	2 Feed %	3 Feed %
Vantage.....	91.4	5.7	2.9
Husky.....	97.1	2.9	—
Harlan.....	34.3	42.9	22.8
Titan.....	85.7	11.4	2.9

Table No. 33. Zones 1A to 2E. All varieties tested in this area were limited to the feed class. **Husky**, **Vantage** and **Titan** were practically equal in grading ability. **Harlan** graded somewhat lower due to lower bushel weight.



Lorence Peterson of Parkbeg, Richard Hennig of Stonehenge and Donald Dreger of Lorlie demonstrate the height of barley in their tests.

TABLE No. 34.—COMMERCIAL GRADES IN PERCENTAGE  
(ZONES 3A TO 4B)

Variety	1 C.W. 2R %	2 C.W. 2R %	3 C.W. 2R %	1 Feed %	2 Feed %	3 Feed %
Vantage.....	—	—	—	78.6	19.0	2.4
Husky.....	—	—	—	95.2	4.8	—
Balder.....	64.3	11.9	7.1	16.7	—	—
Hannchen.....	57.1	21.4	9.5	9.5	—	2.5

Table No. 34. Zones 3A to 4B. At the time of this report **Balder** was not licensed, but for purposes of grading it was considered to be eligible

for the top malting grades and comparable to Hannchen. Husky and Vantage, because they are feed varieties, must be considered separately. On an average basis **Husky** graded somewhat higher than **Vantage** in this area. **Balder** graded slightly better than **Hannchen**.

## SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

TABLE No. 35.—SUMMARIZED RESULTS FOR ZONE 1A  
(6 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	53.3	49.5	52.1	47.4
Days from seeding to ripening.....	94.6	95.3	94.6	91.6
Plant height in inches.....	26.0	25.8	25.4	25.2
Straw strength (maximum of 10).....	8.4	8.1	8.2	7.6
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.7	2.0	1.8	1.8
Bushel weight in pounds.....	49.3	49.0	44.0	49.4
Commercial grades in percentage: 1 Feed.....	100.0	100.0	14.0	100.0
2 Feed.....	—	—	57.3	—
3 Feed.....	—	—	28.7	—

Necessary difference—5.4 bushels.

Table No. 35. **Vantage** placed first in yield in Zone 1A. It had good straw strength and high bushel weight, and graded well.

**Harlan** placed second in yield. It matured at the same time as **Vantage** but because of its lower bushel weight, graded lower than the other varieties.

**Husky** placed third in yield. It matured relatively late and was weaker in neck strength than the other varieties, but graded well.

**Titan** placed fourth in yield but was relatively early in maturity. It had high bushel weight and graded well. In the past, **Titan** has performed well under limited moisture conditions.

The officially recommended varieties in this zone are **Titan** and **Vantage**.

TABLE No. 36.—SUMMARIZED RESULTS FOR ZONE GROUP 1B AND 1C  
(4 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	55.7	53.6	56.0	53.2
Days from seeding to ripening.....	102.0	100.0	96.5	96.0
Plant height in inches.....	29.5	31.5	31.5	31.0
Straw strength (maximum of 10).....	8.7	9.3	9.7	9.4
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.7	1.6	1.9	1.1
Bushel weight in pounds.....	50.3	50.8	45.5	50.3
Commercial grades in percentage: 1 Feed.....	100.0	100.0	50.0	100.0
2 Feed.....	—	—	25.0	—
3 Feed.....	—	—	25.0	—

Necessary difference—8.1 bushels.

Table No. 36. **Harlan** was high in yield, ripened relatively early and had good straw strength, but it was lower in bushel weight and grades than the other varieties.

**Vantage** placed second in yield. It was the latest maturing variety in this zone group and had the weakest straw.

**Husky** and **Titan** were practically equal in yield, straw strength and bushel weight. **Titan** was earlier than the other varieties.

**Titan** is the officially recommended variety in this zone due to its past performance under conditions of limited moisture.

TABLE No. 37.—SUMMARIZED RESULTS FOR ZONE 1D  
(4 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	61.0	67.1	61.7	58.9
Days from seeding to ripening.....	96.8	98.0	94.3	94.0
Plant height in inches.....	30.3	26.0	28.8	28.8
Straw strength (maximum of 10).....	9.1	8.8	8.8	9.3
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.3	2.3	1.7	1.3
Bushel weight in pounds.....	48.5	48.6	46.0	46.5
Commercial grades in percentage: 1 Feed.....	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.



Table No. 37. In this zone the yield differences among varieties are not significant when analyzed statistically. **Husky** was later, shorter in straw, and weaker in neck strength than the other varieties. All varieties graded equally well.

**Harlan** was earlier than **Vantage** and **Husky**, but slightly later than **Titan**. It was somewhat lower in bushel weight than the other varieties.

**Vantage** was mid-late in maturity, exceeded the other varieties in height, and had good bushel weight, straw strength and neck strength.

**Titan** was earlier in maturity than the other varieties. It rated highest in straw strength and had good neck strength.

**Vantage** and **Velvon 11** are officially recommended in this zone.

**TABLE No. 38.—SUMMARIZED RESULTS FOR ZONE GROUP 2A AND 2E**  
(4 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	57.2	50.1	58.8	54.0
Days from seeding to ripening.....	93.7	96.0	91.3	89.0
Height of plants in inches.....	26.3	28.2	26.2	24.0
Straw strength (maximum of 10).....	8.4	9.3	8.9	7.2
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	1.6	1.6	1.6
Bushel weight in pounds.....	48.3	48.6	42.1	45.6
Commercial grades in percentage: 1 Feed.....	83.3	83.3	33.3	50.0
2 Feed.....	16.7	16.7	16.7	33.3
3 Feed.....	—	—	50.0	16.7

Necessary difference—6.3 bushels.

Table No. 38. **Harlan** was high in yield in this zone in 1953. It was medium early but because of its lower bushel weight, graded somewhat lower than the other varieties.

**Vantage** placed second in yield, was mid-late in maturity and had relatively high bushel weight.

**Titan** placed third in yield. It matured early but had weaker and shorter straw than the other varieties.

**Husky** placed fourth in yield. It matured late but had strong straw, high bushel weight and commercial grades.

**Husky**, **Titan**, **Vantage** and **Velvon 11** are officially recommended for Zone 2A. **Plush**, **Titan** and **Vantage** are recommended for Zone 2E.

**TABLE No. 39.—SUMMARIZED RESULTS FOR ZONE 2B**  
(8 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	56.4	51.9	52.6	44.7
Days from seeding to ripening.....	93.3	93.5	90.8	92.3
Height of plants in inches.....	27.8	28.3	27.8	27.0
Straw strength (maximum of 10).....	8.2	8.3	8.0	7.8
Neck strength (basis: 1—strong; 2—medium; 3—weak).....	2.2	2.6	2.0	2.2
Bushel weight in pounds.....	48.7	50.4	44.0	47.3
Commercial grades in percentage: 1 Feed.....	91.0	100.0	18.0	91.0
2 Feed.....	9.0	—	73.0	9.0
3 Feed.....	—	—	9.0	—

Necessary difference—5.6 bushels.

Table No. 39. **Vantage** was the highest yielding variety in this zone. It was relatively late in maturity but proved satisfactory in other characteristics.

**Harlan** placed second in yield. It matured early, but because of low bushel weight, it graded lower than the other varieties.

**Husky** placed third in yield and was late in maturity, but excelled in bushel weight. It was slightly weaker than the other varieties in neck strength.

**Titan** was low in yield and was slightly weaker than the other varieties in straw strength.

**Husky**, **Vantage** and **Velvon 11** are officially recommended for this zone.

TABLE No. 40.—SUMMARIZED RESULTS FOR ZONE 2D  
(3 satisfactory tests)

	Vantage	Husky	Harlan	Titan
Yield in bushels per acre.....	36.0	36.5	34.2	32.6
Days from seeding to ripening.....	—	—	—	—
Plant height in inches.....	—	—	—	—
Straw strength (maximum of 10).....	9.3	8.9	9.2	9.3
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	2.5	1.6	1.5
Bushel weight in pounds.....	49.7	50.3	43.0	48.0
Commercial grades in percentage: 1 Feed.....	67.0	100.0	33.0	67.0
2 Feed.....	—	—	33.0	33.0
3 Feed.....	33.0	—	34.0	—

Necessary difference—11.7 bushels.

Table No. 40. **Husky** outyielded the other varieties in this zone, although the yield differences were not significant. **Husky** was weaker in straw and neck strength than the other varieties but had high bushel weight and graded well.

**Vantage** placed second in yield. It had good straw strength, neck strength and bushel weight.

**Harlan** placed third in yield. It had strong straw but was low in bushel weight and grades.

**Titan** was lowest in yield but had good straw and neck strength, and graded well.

**Husky**, **Vantage** and **Velvon 11** are officially recommended for this zone.

TABLE No. 41.—SUMMARIZED RESULTS FOR ZONE 3A  
(6 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	54.5	64.6	46.4	40.5
Days from seeding to ripening.....	89.3	90.5	90.3	91.3
Plant height in inches.....	31.6	32.4	28.6	32.2
Straw strength (maximum of 10).....	8.3	8.8	8.6	7.9
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	1.9	2.3	2.1
Bushel weight in pounds.....	49.2	50.5	50.3	50.2
Commercial grades in percentage: 1 C.W. 2R.....	—	—	33.0	33.0
2 C.W. 2R.....	—	—	33.0	50.0
3 C.W. 2R.....	—	—	17.0	17.0
1 Feed.....	83.0	100.0	17.0	—
2 Feed.....	17.0	—	—	—

Necessary difference—11.4 bushels.

Table No. 41. **Husky** produced the highest yield in this zone, the difference being significant in the case of **Balder** and **Hannchen**. **Husky** had the strongest straw and highest bushel weight in the zone.

**Vantage** placed second in yield. It was superior in neck strength and ripened early, but was lower in bushel weight than the other varieties.

**Balder** placed third in yield. It was later maturing than **Vantage** but earlier than **Husky** and **Hannchen**. **Balder** was weaker in neck strength and shorter in straw than the other varieties.

**Hannchen** placed fourth in yield in this zone. It was later maturing and had weaker straw than the other varieties.

**Husky**, **Vantage** and **Velvon 11** are officially recommended for this zone.

TABLE No. 42.—SUMMARIZED RESULTS FOR ZONE 3B  
(4 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	51.8	56.9	52.4	43.7
Days from seeding to ripening.....	80.5	82.5	83.5	83.0
Plant height in inches.....	40.5	39.0	35.5	38.0
Straw strength (maximum of 10).....	—	—	—	—
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.0	1.0	2.0	1.9
Bushel weight in pounds.....	47.6	50.4	51.0	50.6
Commercial grades in percentage: 1 C.W. 2R.....	—	—	80.0	80.0
1 Feed.....	80.0	100.0	20.0	—
2 Feed.....	20.0	—	—	—
3 Feed.....	—	—	—	20.0

No significant grain yield difference between varieties.

Table No. 42. **Husky** produced the highest yield, although the yield differences were not significant in this zone. It ripened earlier and was taller than Balder and Hannchen, but had lower bushel weight.

**Balder** placed second in yield. It was later than the other varieties and was weaker in neck strength, but had the highest bushel weight.

**Vantage** placed third in yield. It ripened early and was taller than the other varieties, but was somewhat lower in bushel weight.

**Hannchen** was fourth in yield. It graded slightly lower than Balder.

Husky, Montcalm, Vantage and Velvon 11 are officially recommended in this zone.

TABLE No. 43.—SUMMARIZED RESULTS FOR ZONE 3C  
(6 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	54.9	63.4	54.2	44.2
Days from seeding to ripening.....	95.5	99.5	101.0	99.0
Plant height in inches.....	27.5	29.5	25.0	29.8
Straw strength (maximum of 10).....	8.3	8.6	8.9	7.7
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.5	1.5	1.8	1.8
Bushel weight in pounds.....	47.7	49.1	51.4	51.8
Commercial grades in percentage: 1 C.W. 2R.....	—	—	55.6	22.2
2 C.W. 2R.....	—	—	11.1	44.5
3 C.W. 2R.....	—	—	11.1	11.1
1 Feed.....	77.8	88.8	22.2	22.2
2 Feed.....	11.1	11.2	—	—
3 Feed.....	11.1	—	—	—

Necessary difference—6.3 bushels.

Table No. 43. **Husky** significantly outyielded the other varieties in this zone. It was somewhat later than Vantage but was higher in bushel weight and grades.

**Vantage** placed second in yield, exceeding Hannchen significantly in this respect. It ripened early and had good neck strength, but was low in bushel weight.

**Balder** ranked third in yield. It had relatively high bushel weight and strong straw, but ripened late and was shorter than the other varieties.

**Hannchen** placed fourth in yield and had weaker straw than the other three varieties. It graded substantially lower than Balder.

Husky, Montcalm and Vantage are officially recommended for this zone.

TABLE No. 44.—SUMMARIZED RESULTS FOR ZONE GROUP 3D AND 3F  
(2 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	47.3	46.2	48.7	40.2
Days from seeding to ripening.....	94.7	97.3	99.3	99.0
Plant height in inches.....	26.3	29.0	23.3	26.0
Straw strength (maximum of 10).....	9.2	8.5	8.7	7.3
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.4	1.7	2.7	2.8
Bushel weight in pounds.....	47.3	46.7	52.7	53.3
Commercial grades in percentage: 1 C.W. 2R.....	—	—	100.0	100.0
1 Feed.....	100.0	100.0	—	—

Necessary difference—8.6 bushels.

Table No. 44. **Balder** outyielded the other three varieties in this zone, although the differences were not of a significant nature. It was late maturing, short in straw, and weak in neck strength, but had good bushel weight and grades.

**Vantage** placed second in yield. It matured early and was stronger in straw and neck than the other varieties.

**Husky** placed third in yield. It was later maturing than Vantage but earlier than Balder and Hannchen. Husky and Vantage graded equally well.

**Hannchen** ranked fourth in yield. It was weaker in straw and neck strength, but higher in bushel weight than the other varieties.

Hannchen, Montcalm and Vantage are officially recommended for Zone 3D.

Hannchen, Husky, Montcalm and Vantage are the recommended varieties for Zone 3F.

**TABLE No. 45.—SUMMARIZED RESULTS FOR ZONE 3E**  
(5 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	67.9	71.8	62.9	55.4
Days from seeding to ripening.....	98.0	98.5	99.5	99.0
Height of plants in inches.....	31.0	29.5	25.5	27.8
Straw strength (maximum of 10).....	8.6	7.2	6.6	7.9
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.6	2.1	2.0	2.2
Bushel weight in pounds.....	49.4	50.8	52.4	52.4
Commercial grades in percentage: 1 C.W. 2R.....	—	—	60.0	60.0
2 C.W. 2R.....	—	—	—	—
3 C.W. 2R.....	—	—	20.0	20.0
1 Feed.....	80.0	100.0	20.0	20.0
2 Feed.....	20.0	—	—	—

Necessary difference—5.8 bushels.

Table No. 45. **Husky** outyielded all other varieties in this zone, the yield differences being significant in the case of Balder and Hannchen. **Husky** was slightly higher than **Vantage** in bushel weight and grades.

**Vantage** placed second in yield. It excelled in height, straw strength and neck strength and ripened slightly earlier than the other varieties. **Vantage** was inferior in bushel weight and graded slightly lower than **Husky**.

**Balder** placed third in yield. It had short, weak straw and ripened comparatively late, but had good bushel weight.

**Hannchen** was outyielded by the other varieties. It was comparatively weak in neck strength, but equalled **Balder** in bushel weight and grades.

**Montcalm** and **Vantage** are officially recommended in this zone.

**TABLE No. 46.—SUMMARIZED RESULTS FOR ZONE 3G**  
(3 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	59.6	56.2	39.9	46.3
Days from seeding to ripening.....	98.7	99.3	101.0	99.0
Plant height in inches.....	22.3	19.5	19.8	19.5
Straw strength (maximum of 10).....	9.3	8.9	9.1	9.3
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.8	2.3	1.9	2.0
Bushel weight in pounds.....	50.0	52.5	53.5	53.8
Commercial grades in percentage: 1 C.W. 2R.....	—	—	50.0	75.0
2 C.W. 2R.....	—	—	25.0	25.0
1 Feed.....	100.0	100.0	25.0	—

Necessary difference—12.7 bushels.

Table No. 46. **Vantage** was high in yield, exceeding **Hannchen** and **Balder** by differences which are significant. It was the earliest maturing of the varieties tested in this zone. It had good straw and neck strength but was lower than the other varieties in bushel weight.

**Husky** placed second in yield and was weak in neck strength. **Husky** and **Vantage** graded equally well, although **Husky** was slightly higher in bushel weight.

**Hannchen** was third in yield. It ripened earlier than **Balder** and graded slightly better.

**Balder** was outyielded by the other three varieties and was late in maturity.

**Vantage** is the only variety officially recommended for this zone.

**TABLE No. 47.—SUMMARIZED RESULTS FOR ZONE 3J**  
(4 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	48.4	53.5	53.9	49.5
Days from seeding to ripening.....	97.0	98.0	99.0	98.0
Plant height in inches.....	34.7	33.3	29.7	30.0
Straw strength (maximum of 10).....	9.5	9.5	9.3	9.4
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.3	1.6	2.3	1.9
Bushel weight in pounds.....	47.3	48.3	53.3	53.0
Commercial grades in percentage: 1 C.W. 2R.....	—	—	100.0	100.0
1 Feed.....	100.0	75.0	—	—
2 Feed.....	—	25.0	—	—

No significant grain yield difference between varieties.

Table No. 47. **Balder** was slightly higher in yield than the other varieties, but in no case was the difference significant. It was comparatively late in maturity and weak in neck strength, but had good bushel weight.

**Husky** placed second in yield and gave a generally satisfactory performance.

**Hannchen** placed third in yield. Compared with **Balder**, the only other two-rowed variety in these tests, **Hannchen** ripened earlier, was slightly superior in neck strength and approximately equal in other characteristics.

**Vantage** was low in yield in this zone. It excelled in earliness, neck strength and height, but was low in bushel weight.

**Montcalm** and **Vantage** are officially recommended in this zone.

TABLE No. 48.—SUMMARIZED RESULTS FOR ZONE GROUP 4A AND 4B  
(5 satisfactory tests)

	Vantage	Husky	Balder	Hannchen
Yield in bushels per acre.....	49.8	61.9	55.2	47.6
Days from seeding to ripening.....	97.5	98.5	98.5	98.5
Plant height in inches.....	31.7	32.0	27.7	29.3
Straw strength (maximum of 10).....	8.5	9.0	10.0	6.6
Neck strength—(basis: 1—strong; 2—medium; 3—weak).....	1.5	1.5	1.0	1.0
Bushel weight in pounds.....	45.0	48.0	51.3	51.0
Commercial grades in percentage: 1 C.W. 2R.....	—	—	67.0	50.0
2 C.W. 2R.....	—	—	16.0	17.0
3 C.W. 2R.....	—	—	—	17.0
1 Feed.....	33.0	100.0	17.0	16.0
2 Feed.....	67.0	—	—	—

Necessary difference—7.2 bushels.

Table No. 48. **Husky** outyielded the other three varieties, exceeding **Vantage** and **Hannchen** significantly. **Husky** gave a generally satisfactory performance.

**Balder** placed second in yield. It was strong in straw and neck, and high in bushel weight and grades, but was shorter than the other varieties.

**Vantage**, which placed third in yield, was the earliest variety in this zone. It was low in bushel weight and grades.

**Hannchen** placed fourth in yield. It was lower in straw strength than the other varieties.

**Montcalm** and **Vantage** are officially recommended in Zone 4A. **Vantage** and **Velvon 11** are recommended in Zone 4B.



Beverly Borsa of Smoky Burn and her barley test.



Table No. 49

## Individual Summarized Results of All Tests—Barley

Important—It should be kept in mind that the results of a single test should not be used as the basis for the choice of a variety. A more reliable guide is the yield performance discussion in the summarization according to Cereal Variety Zones, which is based on a large number of tests conducted over a period of years.

## WHEAT POOL DISTRICT 1

Cereal Variety Zone	Sub-Dist.	Test Dist.	Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>BEVERLEY GILLILAND, CAREVALE</b>												
3A.....	1	1	B	Vantage.....	59.2	—	—	—	—	5	1 Feed	—
				Husky.....	76.8	—	—	—	—	53	1 Feed	—
				Balder.....	58.9	—	—	—	—	53	1 C.W. 2R	—
				Hannchen..	44.0	—	—	—	—	51	1 C.W. 2R	—
Necessary difference—6.5 bushels.												
<b>GERALD W. BIBERDORF, FROBISHER</b>												
3A.....	1	4	B	Vantage.....	79.0	87	35	7.8	2.4	50	1 Feed	—
				Husky.....	70.3	87	35	8.0	2.0	52	1 Feed	—
				Balder.....	70.0	89	30	7.8	2.0	53	1 C.W. 2R	—
				Hannchen..	49.9	90	34	6.2	2.0	50	2 C.W. 2R	—
Necessary difference—7.6 bushels.												
<b>WESLEY G. VOECHTING, TRIBUNE</b>												
2A.....	1	7	B	Vantage.....	51.1	82	22	10.0	3.0	48	1 Feed	—
				Husky.....	56.1	87	23	9.2	2.0	49	1 Feed	—
				Harlan.....	48.6	84	24	10.0	3.0	40	3 Feed	—
				Titan.....	40.9	76	20	8.4	2.0	45	2 Feed	—
Necessary difference—7.0 bushels.												
<b>REG. R. CHESSALL, HUME</b>												
2A.....	1	8	B	Vantage.....	73.9	—	35	—	—	44	2 Feed	—
				Husky.....	76.7	—	35	—	—	46	1 Feed	—
				Harlan.....	66.4	—	33	—	—	41	3 Feed	—
				Titan.....	73.6	—	34	—	—	45	2 Feed	—
No significant grain yield difference between varieties.												
<b>BOYD P. PEDERSON, WAUCHOPE</b>												
3A.....	1	10	A	Vantage.....	40.9	88	27	9.6	2.0	52	1 Feed	—
				Husky.....	44.2	90	29	9.8	1.8	50	1 Feed	—
				Balder.....	41.8	95	26	10.0	2.0	48	3 C.W. 2R	—
				Hannchen..	33.3	95	29	9.8	2.0	52	1 C.W. 2R	—
Necessary difference—5.6 bushels.												
Tests discarded on account of damage by flooding, pests, hail, drought or other causes												
2A.....	1	6	B	Frank A. Weinrauch, Torquay.								
2A.....	1	9	B	Ken. F. Stocker, Stoughton.								

## WHEAT POOL DISTRICT 2

<b>ANNA E. APPELQUIST, NEPTUNE</b>												
2A.....	2	1	B	Vantage.....	57.9	107	32	8.0	1.2	52	1 Feed	—
				Husky.....	67.4	110	33	9.6	1.2	52	1 Feed	—
				Harlan.....	73.7	99	29	8.6	1.0	47	1 Feed	—
				Titan.....	61.3	101	32	5.6	1.6	53	1 Feed	—
Necessary difference—3.4 bushels.												
<b>ERIC KOLLER, SCOUT LAKE</b>												
1C.....	2	4	B	Vantage.....	55.9	92	32	9.0	2.0	53	1 Feed	—
				Husky.....	72.2	92	33	8.8	3.0	53	1 Feed	—
				Harlan.....	64.2	87	30	10.0	2.0	48	1 Feed	—
				Titan.....	70.7	90	32	9.0	2.0	53	1 Feed	—
Necessary difference—9.1 bushels.												
<b>LEO H. McKEE, STRATHLEN</b>												
1C.....	2	5	B	Vantage.....	22.3	95	22	—	2.0	47	1 Feed	—
				Husky.....	14.4	101	18	—	2.0	50	1 Feed	—
				Harlan.....	20.5	101	18	—	2.0	41	3 Feed	—
				Titan.....	19.0	91	23	—	1.0	46	1 Feed	—
Necessary difference—3.2 bushels.												

### Wheat Pool District 2—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test Desig- nation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>RICHARD HENNIG, STONEHENGE</b>												
1A.....	2	7	B	Vantage.....	56.3	93	35	10.0	1.0	51	1 Feed	—
				Husky.....	49.5	92	34	9.0	2.0	50	1 Feed	—
				Harlan.....	62.2	92	35	10.0	1.2	45	2 Feed	—
				Titan.....	50.3	86	38	9.0	2.0	51	1 Feed	—

Necessary difference—5.6 bushels.

<b>CARL H. SORENSEN, BURES</b>												
1A.....	2	9	B	Vantage.....	48.1	96	—	—	—	50	1 Feed	—
				Husky.....	48.8	97	—	—	—	50	1 Feed	—
				Harlan.....	38.8	96	—	—	—	43	2 Feed	—
				Titan.....	37.9	95	—	—	—	49	1 Feed	—

Necessary difference—7.1 bushels.

### WHEAT POOL DISTRICT 3

<b>MORLEY R. COLLINS, McCORD</b>												
1C.....	3	1	D	Vantage.....	62.4	97	27	9.2	1.0	49	1 Feed	—
				Husky.....	62.8	98	28	9.0	3.0	50	1 Feed	—
				Harlan.....	67.9	93	31	9.6	1.0	47	1 Feed	—
				Titan.....	64.3	94	29	9.2	1.0	52	1 Feed	—

No significant grain yield difference between varieties.

<b>T. LEE SANDERSON, SENATE</b>												
1C.....	3	5	C	Vantage.....	83.5	104	31	8.0	2.0	55	1 Feed	—
				Husky.....	83.4	103	35	9.0	2.0	56	1 Feed	—
				Harlan.....	86.0	95	35	10.0	2.0	49	1 Feed	—
				Titan.....	83.4	93	34	10.0	1.0	55	1 Feed	—

No significant grain yield difference between varieties.

<b>WALTER H. WERNICKE, CADILLAC</b>												
1C.....	3	9	B	Vantage.....	32.8	—	—	8.0	2.0	49	1 Feed	—
				Husky.....	34.8	—	—	8.0	3.0	50	1 Feed	—
				Harlan.....	23.7	—	—	10.0	1.0	45	2 Feed	—
				Titan.....	31.1	—	—	9.2	2.0	49	1 Feed	—

Necessary difference—4.9 bushels.

<b>BERNARD J. PIGOTT, ANEROID</b>												
1C.....	3	10	B	Vantage.....	32.0	82	23	9.0	1.8	48	1 Feed	—
				Husky.....	32.2	83	21	9.0	2.0	49	1 Feed	—
				Harlan.....	26.5	80	24	10.0	2.4	45	2 Feed	—
				Titan.....	30.1	76	23	9.0	1.4	46	1 Feed	—

Necessary difference—2.9 bushels.

**Tests discarded on account of damage by flooding, pests, hail, drought or other causes**

1C.....	3	4	B	Eugene C. Casat, Claydon.								
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### WHEAT POOL DISTRICT 4

<b>GORDON FORD, MAPLE CREEK</b>												
1B.....	4	2	B	Vantage.....	60.0	—	—	—	—	50	1 Feed	—
				Husky.....	53.3	—	—	—	—	50	1 Feed	—
				Harlan.....	40.1	—	—	—	—	42	3 Feed	—
				Titan.....	53.1	—	—	—	—	47	1 Feed	—

Necessary difference—6.2 bushels.

<b>ALBERT FREIMUTH, GOLDEN PRAIRIE</b>												
1B.....	4	6	B	Vantage.....	41.1	—	28	8.8	1.4	47	1 Feed	—
				Husky.....	38.9	—	28	9.8	1.2	47	1 Feed	—
				Harlan.....	47.4	—	28	9.6	1.8	45	2 Feed	—
				Titan.....	42.7	—	28	9.0	1.2	48	1 Feed	—

No significant grain yield difference between varieties.

<b>HERBERT I. STOCK, RICHMOND</b>												
1B.....	4	7	B	Vantage.....	14.4	—	—	—	—	50	1 Feed	—
				Husky.....	10.0	—	—	—	—	45	2 Feed	—
				Harlan.....	28.2	—	—	—	—	47	1 Feed	—
				Titan.....	7.8	—	—	—	—	49	1 Feed	—

Test damaged by mice—Yields not used in zone summary.

<b>LLOYD M. ROSENAU, MENDHAM</b>												
1B.....	4	8	B	Vantage.....	38.2	99	—	9.4	—	49	1 Feed	—
				Husky.....	38.9	97	—	9.4	—	50	1 Feed	—
				Harlan.....	50.6	98	—	9.4	—	46	1 Feed	—
				Titan.....	33.6	99	—	9.2	—	51	1 Feed	—

Necessary difference—5.4 bushels.

**Test discarded on account of damage by flooding, pests, hail, drought or other causes**

1A.....	4	4	B	V. Yvonne Lloyd, Antelope.								
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# WHEAT POOL DISTRICT 5

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>GLEN A. MILLER, GRAVELBOURG</b>												
1A.....	5	2	B	Vantage.....	56.4	—	20	—	1.6	49	1 Feed	—
				Husky.....	53.3	—	20	—	2.2	50	1 Feed	—
				Harlan.....	55.5	—	20	—	1.8	45	2 Feed	—
				Titan.....	47.0	—	20	—	2.0	49	1 Feed	—
No significant grain yield difference between varieties.												
<b>KENNETH G. CHRISTOPHER, PAMBRUN</b>												
1A.....	5	3	B	Vantage.....	7.9	84	11	5.0	2.0	47	1 Feed	—
				Husky.....	7.7	85	11	4.8	2.6	46	1 Feed	—
				Harlan.....	7.3	85	11	4.4	2.6	42	3 Feed	—
				Titan.....	6.5	80	10	4.6	1.4	47	1 Feed	—
Test damaged by drought—Yields not used in zone summary.												
<b>P. WAYNE SHELTON, OLD WIVES</b>												
1A.....	5	6	B	Vantage.....	53.0	95	31	8.4	2.0	46	1 Feed	—
				Husky.....	48.9	95	33	8.6	1.6	46	1 Feed	—
				Harlan.....	41.9	98	32	8.6	2.0	42	3 Feed	—
				Titan.....	51.1	90	29	7.2	1.6	48	1 Feed	—
Necessary difference—4.8 bushels.												
<b>LORENCE I. PETERSON, PARKBEG</b>												
1A.....	5	7	B	Vantage.....	41.4	99	33	—	—	52	1 Feed	—
				Husky.....	43.1	99	31	—	—	53	1 Feed	—
				Harlan.....	44.6	96	29	—	—	47	1 Feed	—
				Titan.....	33.7	98	29	—	—	52	1 Feed	—
Necessary difference—3.8 bushels.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
1A.....	5	3	C	Thomas J. Runcie, Pambrun.								

# WHEAT POOL DISTRICT 6

<b>PETER G. WARNKE, SEDLEY</b>												
2A.....	6	2	B	Vantage.....	39.7	—	29	5.4	1.2	46	1 Feed	—
				Husky.....	27.4	—	36	9.0	1.0	43	2 Feed	—
				Harlan.....	25.6	—	32	7.0	1.0	35	3 Feed	—
				Titan.....	12.1	—	27	3.8	1.8	35	3 Feed	—
Test damaged by flooding and frost—Yields not used in zone summary.												
<b>WILFRED R. FILAZEK, SPRING VALLEY</b>												
1A.....	6	4	B	Vantage.....	65.0	101	—	10.0	2.0	50	1 Feed	—
				Husky.....	53.6	104	—	9.8	1.8	48	1 Feed	—
				Harlan.....	70.0	101	—	9.8	1.4	45	2 Feed	—
				Titan.....	64.8	101	—	9.6	2.0	50	1 Feed	—
Necessary difference—8.6 bushels.												
<b>DICK T. LOWERY, ROWATT</b>												
2E.....	6	7	D	Vantage.....	45.9	—	26	9.0	1.2	51	1 Feed	—
				Husky.....	45.9	—	26	9.0	1.0	52	1 Feed	—
				Harlan.....	46.5	—	26	9.0	1.0	47	1 Feed	—
				Titan.....	40.3	—	23	8.4	1.6	50	1 Feed	—
No significant grain yield difference between varieties.												
<b>DONALD C. DREGER, LORLIE</b>												
3C.....	6	9	B	Vantage.....	42.2	97	29	9.0	1.0	47	1 Feed	—
				Husky.....	48.5	100	31	9.0	1.0	49	1 Feed	—
				Balder.....	42.9	104	26	9.0	1.8	52	1 C.W. 2R	—
				Hannchen.....	36.8	100	33	5.8	1.4	52	1 C.W. 2R	—
Necessary difference—4.4 bushels.												

# WHEAT POOL DISTRICT 7

<b>DICK F. THOMPSON, KELSO</b>												
3A.....	7	1	B	Vantage.....	40.2	94	37	6.0	1.0	45	2 Feed	—
				Husky.....	70.3	97	41	8.0	1.0	49	1 Feed	—
				Balder.....	37.5	89	35	8.0	2.0	50	2 C.W. 2R	—
				Hannchen.....	36.6	91	40	6.0	2.0	50	2 C.W. 2R	—
Necessary difference—7.2 bushels.												
<b>MELBOURNE C. KING, LANGBANK</b>												
3A.....	7	3	B	Vantage.....	56.3	—	27	9.6	1.0	46	1 Feed	—
				Husky.....	68.1	—	25	9.4	2.6	46	1 Feed	—
				Balder.....	11.9	—	26	8.4	3.0	46	1 Feed	—
				Hannchen.....	30.8	—	28	9.4	2.4	47	3 C.W. 2R	—
Necessary difference—4.6 bushels.												

# Wheat Pool District 7—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>DAVID G. INNES, OSAGE</b>												
2A.....	7	5	C	Vantage.....	27.2	92	14	9.8	2.6	49	1 Feed	—
				Husky.....	26.9	91	16	9.6	2.6	50	1 Feed	—
				Harlan.....	20.2	91	13	9.8	2.0	43	2 Feed	—
				Titan.....	14.5	90	8	10.0	1.0	46	1 Feed	—
Test damaged by flooding—Yields not used in zone summary.												
<b>LEONA BEAUDIN, MONTMARTRE</b>												
3A.....	7	6	B	Vantage.....	51.4	88	32	—	—	52	1 Feed	—
				Husky.....	57.4	88	32	—	—	53	1 Feed	—
				Balder.....	58.5	88	26	—	—	52	2 C.W. 2R	S.G.
				Hannchen..	48.6	89	30	—	—	51	2 C.W. 2R	S.G.
No significant grain yield difference between varieties.												
<b>CLARENCE GELOWITZ, GRAYSON</b>												
3C.....	7	11	B	Vantage.....	45.4	94	28	7.0	1.0	48	1 Feed	—
				Husky.....	51.8	99	30	8.2	1.0	48	1 Feed	—
				Balder.....	47.1	98	26	9.4	1.2	51	1 Feed	G.
				Hannchen..	42.1	98	31	8.0	1.8	52	1 Feed	G.
Necessary difference—5.0 bushels.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
3B.....	7	2	B	Edward A. Plewes, Moosomin.								
3C.....	7	8	B	M. Gilbert Lloyd, Rocanville.								

# WHEAT POOL DISTRICT 8

<b>ANDY ZRUDLO, WROXTON</b>												
3B.....	8	1	B	Vantage.....	65.2	—	—	—	—	47	1 Feed	—
				Husky.....	74.6	—	—	—	—	51	1 Feed	—
				Balder.....	71.0	—	—	—	—	52	1 C.W. 2R	—
				Hannchen..	56.2	—	—	—	—	52	1 C.W. 2R	—
Necessary difference—10.6 bushels.												
<b>PATRICIA KELLY, SALTCOATS</b>												
3B.....	8	2	B	Vantage.....	41.1	—	—	—	—	49	1 Feed	—
				Husky.....	43.7	—	—	—	—	51	1 Feed	—
				Balder.....	38.9	—	—	—	—	54	1 C.W. 2R	—
				Hannchen..	30.4	—	—	—	—	54	1 C.W. 2R	—
Necessary difference—7.3 bushels.												
<b>RICHARD W. ROUSAY, YORKTON</b>												
3C.....	8	4	B	Vantage.....	13.8	—	22	—	—	41	3 Feed	—
				Husky.....	15.4	—	24	—	—	43	2 Feed	—
				Balder.....	20.3	—	22	—	—	48	3 C.W. 2R	—
				Hannchen..	18.1	—	27	—	—	48	3 C.W. 2R	—
Test damaged by flooding—Yields not used in zone summary.												
<b>DONALD BERNDT, VERIGIN</b>												
3B.....	8	5	B	Vantage.....	58.6	81	36	10.0	1.0	50	1 Feed	—
				Husky.....	58.7	83	36	10.0	1.0	51	1 Feed	—
				Balder.....	53.2	84	32	10.0	2.0	54	1 C.W. 2R	—
				Hannchen..	47.8	84	36	4.2	1.8	52	1 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>BERNICE FULLAWKA, TADMORE</b>												
3B.....	8	6	B	Vantage.....	42.4	—	—	—	—	48	1 Feed	—
				Husky.....	50.5	—	—	—	—	51	1 Feed	—
				Balder.....	46.3	—	—	—	—	51	1 C.W. 1R	—
				Hannchen..	40.2	—	—	—	—	53	1 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>RONALD F. CHERNIPESKI, THEODORE</b>												
3C.....	8	7	B	Vantage.....	21.6	—	31	7.0	3.0	50	1 Feed	—
				Husky.....	25.7	—	33	7.0	3.0	49	1 Feed	—
				Balder.....	28.2	—	26	8.0	2.0	51	1 C.W. 2R	—
				Hannchen..	20.5	—	28	8.0	2.0	50	2 C.W. 2R	—
Test damaged by hail and birds—Yields not used in zone summary.												
<b>BEVERLEY FIALA, HYAS</b>												
3B.....	8	9	B	Vantage.....	73.0	80	45	—	1.0	44	2 Feed	—
				Husky.....	80.7	82	42	—	1.0	48	1 Feed	—
				Balder.....	45.9	83	39	—	2.0	46	1 Feed	—
				Hannchen..	43.9	82	40	—	2.0	42	3 Feed	—
Test damaged by lodging—Yields not used in zone summary.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
3C.....	8	3	B	Alvin A. Miller, Cana.								

# WHEAT POOL DISTRICT 9

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>VIOLET HILLIAR, ITUNA</b>												
3C.....	9	1	B	Vantage.....	63.6	—	—	10.0	1.0	51	1 Feed	—
				Husky.....	79.9	—	—	10.0	1.0	53	1 Feed	—
				Balder.....	60.6	—	—	9.0	2.0	53	1 C.W. 2R	—
				Hannchen..	38.2	—	—	9.0	2.0	50	2 C.W. 2R	—
Necessary difference—6.1 bushels.												
<b>ALEXANDER A. RHEAD, LEROSS</b>												
3C.....	9	3	B	Vantage.....	40.4	—	34	8.0	1.8	50	1 Feed	—
				Husky.....	56.5	—	32	6.8	2.1	51	1 Feed	—
				Balder.....	53.7	—	32	4.6	1.8	53	1 Feed	G.
				Hannchen..	44.0	—	32	5.2	1.8	52	1 Feed	G.
Necessary difference—3.6 bushels.												
<b>TERRY H. BATTY, SILTON</b>												
2B.....	9	4	B	Vantage.....	103.2	—	—	—	—	53	1 Feed	—
				Husky.....	97.1	—	—	—	—	52	1 Feed	—
				Harlan.....	82.1	—	—	—	—	46	1 Feed	—
				Titan.....	80.0	—	—	—	—	50	1 Feed	—
Samples incomplete due to lodging—Yields not used in zone summary.												
<b>LYLE J. ROCKEL, LANIGAN</b>												
2B.....	9	6	C	Vantage.....	58.9	—	29	7.0	2.8	50	1 Feed	—
				Husky.....	51.3	—	30	7.4	3.0	49	1 Feed	—
				Harlan.....	62.7	—	30	6.4	2.8	45	2 Feed	—
				Titan.....	30.3	—	29	5.8	2.8	48	1 Feed	—
Necessary difference—6.5 bushels.												
<b>DOUGLAS J. SMITH, DAFOE</b>												
2B.....	9	8	B	Vantage.....	65.0	—	—	—	—	50	1 Feed	—
				Husky.....	35.4	—	—	—	—	50	1 Feed	—
				Harlan.....	115.2	—	—	—	—	44	2 Feed	—
				Titan.....	64.4	—	—	—	—	47	1 Feed	—
Test damaged by shattering—Yields not used in zone summary.												
<b>GEORGE W. PERRY, WISHART</b>												
3C.....	9	9	B	Vantage.....	70.6	—	—	—	—	50	1 Feed	—
				Husky.....	72.5	—	—	—	—	51	1 Feed	—
				Balder.....	66.0	—	—	—	—	52	1 C.W. 2R	—
				Hannchen..	57.0	—	—	—	—	51	1 C.W. 2R	—
Necessary difference—8.0 bushels.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
3C.....	9	2	B	R. Arthur Williams, Cupar.								

# WHEAT POOL DISTRICT 10

<b>STAN W. SLOAN, CRAIK</b>												
2B.....	10	1	B	Vantage.....	70.2	—	34	—	—	50	1 Feed	—
				Husky.....	56.2	—	36	—	—	52	1 Feed	—
				Harlan.....	68.8	—	33	—	—	44	2 Feed	—
				Titan.....	53.6	—	33	—	—	49	1 Feed	—
Necessary difference—4.3 bushels.												
<b>WAYNE L. WILSON, TUGASKE</b>												
2B.....	10	2	B	Vantage.....	48.5	—	—	—	—	49	1 Feed	—
				Husky.....	45.5	—	—	—	—	49	1 Feed	—
				Harlan.....	50.6	—	—	—	—	44	2 Feed	—
				Titan.....	38.8	—	—	—	—	50	1 Feed	—
Necessary difference—5.3 bushels.												
<b>FOSTER I. CLARK, BOUNTY</b>												
2B.....	10	5	D	Vantage.....	73.0	—	—	—	—	50	1 Feed	—
				Husky.....	66.9	—	—	—	—	51	1 Feed	—
				Harlan.....	54.5	—	—	—	—	41	3 Feed	—
				Titan.....	62.0	—	—	—	—	46	1 Feed	—
Necessary difference—6.0 bushels.												
<b>ELDON P. MADSEN, BRODERICK</b>												
2B.....	10	6	B	Vantage.....	38.8	—	—	—	—	48	1 Feed	—
				Husky.....	31.2	—	—	—	—	51	1 Feed	—
				Harlan.....	34.7	—	—	—	—	44	2 Feed	—
				Titan.....	35.6	—	—	—	—	46	1 Feed	—
Necessary difference—2.7 bushels.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
2B.....	10	7	C	Ernest A. Boucher, Davidson.								
2B.....	10	8	B	Edward C. Gross, Watrous.								



## WHEAT POOL DISTRICT 11

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
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### ANN E. CALWELL, ELROSE

1D.....	11	2	B	Vantage.....	76.5	101	38	9.0	2.2	50	1 Feed	—
				Husky.....	81.0	103	33	8.4	3.0	52	1 Feed	—
				Harlan.....	77.1	102	33	7.8	3.0	46	1 Feed	—
				Titan.....	73.4	101	35	8.6	2.2	49	1 Feed	—

No significant grain yield difference between varieties.

### BRUNO E. WIENS, HERSCHEL

1D.....	11	8	C	Vantage.....	48.2	102	26	9.0	1.0	46	1 Feed	—
				Husky.....	53.8	105	23	10.0	2.0	47	1 Feed	—
				Harlan.....	48.5	99	26	10.0	1.0	46	1 Feed	—
				Titan.....	49.8	99	25	10.0	1.0	47	1 Feed	—

No significant grain yield difference between varieties.

### RALPH G. HURST, DODSLAND

2D.....	11	9	B	Vantage.....	53.8	—	—	10.0	1.0	52	1 Feed	—
				Husky.....	57.8	—	—	9.0	2.0	53	1 Feed	—
				Harlan.....	41.5	—	—	10.0	1.0	48	1 Feed	—
				Titan.....	45.9	—	—	10.0	1.0	51	1 Feed	—

Necessary difference—6.3 bushels.

### WILLIAM H. WARRINGTON, MERID

D.....	11	10	B	Vantage.....	62.3	91	30	10.0	1.0	49	1 Feed	—
				Husky.....	72.0	91	24	9.0	2.0	49	1 Feed	—
				Harlan.....	67.2	88	29	10.0	1.0	46	1 Feed	—
				Titan.....	65.5	90	27	10.0	1.0	51	1 Feed	—

No significant grain yield difference between varieties.

### Tests discarded on account of damage by flooding, pests, hail, drought and other causes

1A.....	11	1	B	David L. Banks, Kyle.								
1D.....	11	3	B	Elwyne Klettke, Madison.								

## WHEAT POOL DISTRICT 12

### RALPH DONAHUE, BIGGAR

2D.....	12	1	B	Vantage.....	17.5	—	13	8.6	2.2	42	3 Feed	—
				Husky.....	26.3	—	14	8.8	3.0	47	1 Feed	—
				Harlan.....	17.6	—	14	8.4	2.2	36	3 Feed	—
				Titan.....	14.1	—	11	8.6	2.0	43	2 Feed	—

Necessary difference—5.1 bushels.

### RONALD C. SINGER, BIGGAR

2D.....	12	2	B	Vantage.....	36.6	—	—	—	—	49	1 Feed	—
				Husky.....	25.4	—	—	—	—	51	1 Feed	—
				Harlan.....	43.6	—	—	—	—	45	2 Feed	—
				Titan.....	37.9	—	—	—	—	49	1 Feed	—

Necessary difference—5.8 bushels.

### W. LAWRENCE FEIL, CACTUS LAKE

D.....	12	6	B	Vantage.....	57.0	93	27	8.4	1.0	49	1 Feed	—
				Husky.....	62.6	93	24	7.6	2.0	51	1 Feed	—
				Harlan.....	54.1	88	27	7.2	1.6	46	1 Feed	—
				Titan.....	46.7	86	28	8.4	1.0	49	1 Feed	—

No significant grain yield difference between varieties.

### RICHARD P. DeBELSER, WINTER

3E.....	12	7	B	Vantage.....	103.6	—	32	8.6	1.0	51	1 Feed	—
				Husky.....	96.2	—	30	7.8	2.6	53	1 Feed	—
				Balder.....	95.8	—	25	6.4	2.0	54	1 C.W. 2R	—
				Hannchen.....	88.2	—	27	7.4	2.2	54	1 C.W. 2R	—

Necessary difference—4.9 bushels.

### ERWIN L. BOULTON, BATTLEFORD

3G.....	12	10	B	Vantage.....	34.2	104	22	9.6	1.4	49	1 Feed	—
				Husky.....	32.3	105	19	8.8	1.8	51	1 Feed	—
				Balder.....	24.2	105	18	9.4	1.4	53	1 C.W. 2R	—
				Hannchen.....	35.1	104	19	9.4	1.2	55	1 C.W. 2R	—

Necessary difference—4.6 bushels.

### Tests discarded on account of damage by flooding, pests, hail, drought and other causes

1A.....	12	4	B	M. Ronald McGinnis, Luseland.								
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## WHEAT POOL DISTRICT 13

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>JOHN J. ZERR, ALLAN</b>												
2B.....	13	3	A	Vantage.....	30.4	99	22	6.5	3.0	49	1 Feed	—
				Husky.....	35.3	102	26	6.5	3.0	51	1 Feed	—
				Harlan.....	34.7	97	24	6.0	3.0	44	2 Feed	—
				Titan.....	31.5	101	20	5.5	3.0	47	1 Feed	—
Test damaged by livestock—Yields not used in zone summary.												
<b>FRANK SAFINUK, COLONSAY</b>												
2B.....	13	4	B	Vantage.....	71.4	94	27	10.0	2.2	44	2 Feed	—
				Husky.....	66.4	91	27	10.0	3.0	47	1 Feed	—
				Harlan.....	65.8	89	28	10.0	1.4	43	2 Feed	—
				Titan.....	62.7	93	27	10.0	1.8	46	1 Feed	—
Necessary difference—4.2 bushels.												
<b>DEMPSEY SEDELNICK, STRUAN</b>												
2B.....	13	7	A	Vantage.....	42.2	84	25	9.4	1.2	46	1 Feed	—
				Husky.....	43.8	85	23	8.8	2.0	51	1 Feed	—
				Harlan.....	31.5	84	22	8.6	1.0	43	2 Feed	—
				Titan.....	34.4	83	24	8.8	1.4	44	2 Feed	—
Necessary difference—6.4 bushels.												
<b>GUY BANDET, PRUD'HOMME</b>												
2B.....	13	8	C	Vantage.....	48.0	96	30	8.0	2.0	47	1 Feed	—
				Husky.....	53.6	96	28	8.6	2.0	51	1 Feed	—
				Harlan.....	51.9	93	30	9.0	2.0	46	1 Feed	—
				Titan.....	40.2	92	29	9.0	2.0	47	1 Feed	—
No significant grain yield difference between varieties.												
<b>RITA SCHWARK, CUDWORTH</b>												
3C.....	13	9	B	Vantage.....	67.4	—	—	—	—	47	1 Feed	—
				Husky.....	71.2	—	—	—	—	49	1 Feed	—
				Balder.....	55.3	—	—	—	—	52	2 C.W. 2R	St.
				Hannchen..	47.1	—	—	—	—	52	2 C.W. 2R	St.
Necessary difference—9.8 bushels.												

## WHEAT POOL DISTRICT 14

<b>JAMES N. WILSON, OKLA</b>												
4A.....	14	1	A	Vantage.....	28.1	—	—	7.0	2.0	45	2 Feed	—
				Husky.....	27.0	—	—	8.0	2.0	47	1 Feed	—
				Balder.....	39.2	—	—	10.0	1.0	51	1 C.W. 2R	—
				Hannchen..	29.5	—	—	6.0	1.0	50	2 C.W. 2R	—
Test damaged by shattering—Yields not used in zone summary.												
<b>WILLIAM ZAPOROSKY, FOSSTON</b>												
3C.....	14	4	B	Vantage.....	38.4	—	—	—	—	45	2 Feed	—
				Husky.....	23.3	—	—	—	—	49	1 Feed	—
				Balder.....	41.0	—	—	—	—	51	1 C.W. 2R	—
				Hannchen..	30.8	—	—	—	—	49	2 C.W. 2R	—
Test damaged by hail—Yields not used in zone summary.												
<b>G. TERRY FENNELL, MELFORT</b>												
3D.....	14	8	A	Vantage.....	41.3	94	27	7.6	2.2	48	1 Feed	—
				Husky.....	42.1	98	33	8.0	1.8	42	1 Feed	—
				Balder.....	49.8	94	25	8.2	3.0	54	1 C.W. 2R	—
				Hannchen..	40.7	95	31	7.2	2.8	54	1 C.W. 2R	—
Necessary difference—2.2 bushels.												
<b>R. J. DUANE FREED, LENVALE</b>												
3D.....	14	9	B	Vantage.....	53.2	100	30	10.0	1.0	48	1 Feed	—
				Husky.....	50.2	102	32	8.0	2.0	49	1 Feed	—
				Balder.....	47.6	102	25	9.0	3.0	52	1 C.W. 2R	—
				Hannchen..	39.6	104	27	7.0	3.0	53	1 C.W. 2R	—
Necessary difference—6.5 bushels.												
<b>BEVERLY BORSA, SMOKY BURN</b>												
3F.....	14	11	B	Vantage.....	14.2	90	22	10.0	1.0	46	1 Feed	—
				Husky.....	15.6	92	22	9.6	1.4	49	1 Feed	—
				Balder.....	15.6	102	20	9.0	2.0	52	1 C.W. 2R	—
				Hannchen..	15.8	98	20	7.8	2.6	53	1 C.W. 2R	—
Test damaged by flooding—Yields not used in zone summary.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
3F.....	14	3	B	Donald Clark, Silver Park.								
4A.....	14	7	B	Florian W. Slugoski, Peesane.								

# WHEAT POOL DISTRICT 15

Cereal Variety Zone	Dist.	Sub-Dist.	Test Designation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per measured bushel	Commercial grades	Grading remarks
<b>HARALD JENSEN, FIR RIDGE</b>												
3J.....	15	3	B	Vantage.....	45.8	97	36	9.0	1.0	46	1 Feed	—
				Husky.....	56.5	98	36	9.0	1.0	47	1 Feed	—
				Balder.....	52.7	99	28	8.6	1.2	54	1 C.W. 2R	—
				Hannchen..	47.6	98	27	8.8	1.0	52	1 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>DAVID LESSER, HAGUE</b>												
3G.....	15	4	B	Vantage.....	105.0	95	31	8.4	1.6	52	1 Feed	—
				Husky.....	100.9	95	29	8.4	2.4	54	1 Feed	—
				Balder.....	68.7	96	27	7.8	2.0	54	2 C.W. 2R	G.
				Hannchen..	68.4	94	28	8.6	2.2	52	1 C.W. 2R	—
Necessary difference—12.6 bushels.												
<b>WILLIAM H. O. REED, SHELL LAKE</b>												
4B.....	15	6	B	Vantage.....	34.6	—	—	—	—	44	2 Feed	—
				Husky.....	38.3	—	—	—	—	46	1 Feed	—
				Balder.....	42.3	—	—	—	—	51	1 C.W. 2R	—
				Hannchen..	37.4	—	—	—	—	53	1 C.W. 2R	—
Necessary difference—3.7 bushels.												
<b>JIM L. HUNTER, FOXDALE</b>												
3J.....	15	8	B	Vantage.....	51.9	—	30	10.0	1.0	50	1 Feed	—
				Husky.....	59.7	—	30	10.0	2.0	51	1 Feed	—
				Balder.....	64.0	—	26	10.0	3.0	54	1 C.W. 2R	—
				Hannchen..	52.6	—	28	10.0	3.0	54	1 C.W. 2R	—
Necessary difference—6.2 bushels.												
<b>ALEX DENYSUIK, HENRIBOURG</b>												
3J.....	15	9	B	Vantage.....	27.8	—	38	—	2.0	47	1 Feed	—
				Husky.....	27.5	—	34	—	2.2	45	2 Feed	—
				Balder.....	35.4	—	35	—	2.6	52	1 C.W. 2R	—
				Hannchen..	35.5	—	36	—	1.8	52	1 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>ALOIS W. SUBCHYSHYN, JANOW CORNERS</b>												
3J.....	15	10	A	Vantage.....	68.1	—	—	—	—	46	1 Feed	—
				Husky.....	70.2	—	—	—	—	50	1 Feed	—
				Balder.....	63.4	—	—	—	—	53	1 C.W. 2R	—
				Hannchen..	62.1	—	—	—	—	54	1 C.W. 2R	—
No significant grain yield difference between varieties.												

# WHEAT POOL DISTRICT 16

<b>MARVIN PHILLIPS, RICHARD</b>												
3G.....	16	2	B	Vantage.....	39.5	97	18	9.8	2.4	49	1 Feed	—
				Husky.....	35.5	98	15	9.6	2.8	53	1 Feed	—
				Balder.....	26.8	102	14	10.0	2.2	54	1 C.W. 2R	—
				Hannchen..	35.3	99	15	9.8	2.6	55	1 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>DOUGLAS W. ILLINGWORTH, NORTH BATTLEFORD</b>												
3G.....	16	3	B	Vantage.....	21.5	—	18	—	—	50	1 Feed	—
				Husky.....	18.6	—	15	—	—	52	1 Feed	—
				Balder.....	29.1	—	20	—	—	53	1 Feed	G.
				Hannchen..	26.1	—	16	—	—	53	2 C.W. 2R	W. St.
Test badly shattered—Yields not used in zone summary.												
<b>DAVID S. OTTAS, EDAM</b>												
3E.....	16	4	B	Vantage.....	26.0	—	25	8.0	1.8	49	1 Feed	—
				Husky.....	9.4	—	23	3.8	2.2	50	1 Feed	—
				Balder.....	—	—	20	1.0	3.0	—	—	—
				Hannchen..	4.6	—	23	2.0	3.0	52	1 C.W. 2R	—
Test damaged by rain and hail, samples incomplete—Yields not used in zone summary.												
<b>LANO R. HINDE, WASECA</b>												
3E.....	16	5	B	Vantage.....	71.9	95	33	8.8	1.8	53	1 Feed	—
				Husky.....	75.9	95	31	9.0	2.4	53	1 Feed	—
				Balder.....	65.1	96	26	9.0	2.0	54	1 C.W. 2R	—
				Hannchen..	57.1	95	28	8.2	2.4	53	1 C.W. 2R	—
Necessary difference—8.8 bushels.												
<b>ROBERT G. LONG, FURNESS</b>												
3E.....	16	6	B	Vantage.....	47.2	118	24	9.0	3.0	50	1 Feed	—
				Husky.....	56.4	121	18	10.0	3.0	50	1 Feed	—
				Balder.....	53.4	126	15	9.0	3.0	53	1 Feed	G.
				Hannchen..	41.7	116	20	9.0	3.0	52	1 Feed	G.
No significant grain yield difference between varieties.												

# Wheat Pool District 16—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test Design- nation	Varieties	Yield bus. per acre	Days seeding to ripening	Plant height in inches	Straw strength	Neck strength	Lbs. per meas- ured bushel	Com- mercial grades	Grading remarks
<b>JOE ROTHERY, DEER CREEK</b>												
3E.....	16	7	B	Vantage.....	77.4	—	—	—	—	50	1 Feed	—
				Husky.....	78.7	—	—	—	—	51	1 Feed	—
				Balder.....	61.5	—	—	—	—	53	1 C.W. 2R	—
				Hannchen..	52.6	—	—	—	—	53	1 C.W. 2R	—
Necessary difference—6.8 bushels.												
<b>DONNA A. FOSTER, SPRUCE LAKE</b>												
3E.....	16	8	D	Vantage.....	39.2	101	34	9.0	1.6	43	2 Feed	—
				Husky.....	51.7	102	34	9.0	1.0	47	1 Feed	—
				Balder.....	38.9	103	31	10.0	1.0	48	3 C.W. 2R	—
				Hannchen..	37.6	103	33	10.0	1.0	50	3 C.W. 2R	St.
Necessary difference—4.3 bushels.												
<b>DAVID GAMBLE, MEDSTEAD</b>												
4B.....	16	9	B	Vantage.....	73.0	—	—	—	—	43	2 Feed	—
				Husky.....	101.1	—	—	—	—	47	1 Feed	—
				Balder.....	77.2	—	—	—	—	49	1 Feed	G.
				Hannchen..	65.1	—	—	—	—	46	1 Feed	—
Necessary difference—12.2 bushels.												
<b>JOSEPH A. WILICK, MILDRED</b>												
4B.....	16	10	C	Vantage.....	52.8	92	31	—	—	48	1 Feed	—
				Husky.....	65.2	92	29	—	—	50	1 Feed	—
				Balder.....	51.7	93	28	—	—	55	1 C.W. 2R	—
				Hannchen..	52.7	93	26	—	—	55	1 C.W. 2R	—
Necessary difference—2.5 bushels.												
<b>GAYLE M. CONLAN, DORINTOSH</b>												
4B.....	16	11	B	Vantage.....	38.4	—	33	—	—	43	2 Feed	—
				Husky.....	44.6	—	33	—	—	47	1 Feed	—
				Balder.....	44.1	—	27	—	—	49	2 C.W. 2R	—
				Hannchen..	38.8	—	31	—	—	49	3 C.W. 2R	—
No significant grain yield difference between varieties.												
<b>FRANK J. AND RICHARD J. HUTTER, GOODSOIL</b>												
4B.....	16	11	C	Vantage.....	50.1	103	31	10.0	1.0	47	1 Feed	—
				Husky.....	60.5	105	34	10.0	1.0	51	1 Feed	—
				Balder.....	60.5	104	28	10.0	1.0	53	1 C.W. 2R	—
				Hannchen..	44.1	104	31	7.2	1.0	53	1 C.W. 2R	—
Necessary difference—4.3 bushels.												
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>												
4B.....	16	8	C	David J. Rundberg, Spruce Lake.								



Albert Freimuth with the barley test which he supervised at Golden Prairie.

## FLAX TESTS

A total of 34 flax tests were conducted in 1953 and these were located in Cereal Variety Zones 2A, 2E, 3A, 3B, 3C, 3D, 3F, 3J and 4B (see Cereal Variety Zone map, page 41). The varieties tested were Rocket, Redwood, Marine, 3901-D (Raja) and CI-1155.

### DESCRIPTION OF VARIETIES

**Rocket** was developed at the Central Experimental Farm, Ottawa, from the cross Argentine 8C X Redwing. It is resistant to rust and moderately resistant to wilt. Rocket is mid-late in maturity. It has large brown seeds which produce a high quantity of good quality oil. It is a high yielding variety which is recommended for use in most zones of Saskatchewan.

**Redwood** was developed by the Minnesota Agricultural Experiment Station, in co-operation with the United States Department of Agriculture. It is immune to the present races of rust and is resistant to wilt. Redwood is a late maturing variety. It has brown seeds which produce high quality oil. Redwood is a licensed variety which is still undergoing tests in Saskatchewan.

**Marine** was originated at the North Dakota Experiment Station, Fargo, from the cross C.I. 975 X Sheyenne. It is immune to the present races of rust and is resistant to wilt. Marine is an early maturing variety. It has brown seeds which produce a high percentage of good quality oil. Marine is a licensed variety which is still undergoing tests in Saskatchewan.

**3901-D (Raja)** was developed at the Central Experimental Farm, Ottawa. It is an early maturing variety with short, strong straw. It has large seeds which produce high oil content. Raja is immune to rust, and is resistant to wilt and pasmo. Raja is a licensed variety which is still undergoing tests in Saskatchewan.

**CI-1155** was developed at the Minnesota Agricultural Experiment Station. It is high yielding, medium-early, and has strong straw. The seed is medium to small in size and has high oil content. It is resistant to rust and pasmo and moderately resistant to wilt. CI-1155 is in the early testing stage and has not yet been licensed.

TABLE No. 50—AVERAGE YIELDS IN BUSHELS PER ACRE  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	No. of Satisfactory Tests	Rocket	Redwood	Marine	Raja	CI-1155	Necessary Difference* in Bushels
2A.....	3	13.1	13.6	12.2	12.3	15.8	2.65
2E.....	2	17.1	18.9	14.4	13.6	18.4	N.S.
3A.....	3	19.1	19.3	22.1	21.2	18.5	N.S.
3B.....	4	14.1	17.1	15.6	15.6	19.9	2.86
3C.....	6	19.8	20.3	18.4	17.3	20.8	2.09
3D and 3F.....	4	30.6	29.3	25.6	25.6	29.9	3.31
3J.....	2	14.8	12.8	13.5	11.8	14.9	N.S.

\*Necessary difference.—Since yielding ability of varieties cannot be measured with absolute accuracy, small differences have no significance. "Necessary difference" is a statistical measurement of this difference. Unless the difference in yield of two varieties is greater than the necessary difference as shown in the tables little confidence can be placed in the superiority of one variety over the other in that particular zone group.

N.S.—No significant grain yield difference between varieties.

Note.—Only one satisfactory test was conducted in zone 4B.

### Grain Yield and Official Recommendations

An average of all tests shows that CI-1155 was highest in yield. It was tested by the Wheat Pool for the first time in 1953 and placed first in four zones and second in two others. Further testing is required before definite recommendations can be made. CI-1155 is a new variety and at the time of writing it has not been licensed.

**Redwood** ranked second in average yield. It placed first in one zone and was second in three. In Wheat Pool tests during 1952 Redwood outyielded all other varieties on an average basis. On the basis of its performance in a large number of tests Redwood was officially recommended in 1954 in approximately half the zones in Saskatchewan.



**Rocket** placed third in yield during 1952 and 1953. The differences between this variety and Redwood were usually of a minor nature. During 1953 Rocket was first in one zone, second in two, and third in three zones. Because of its good performance in recent years, Rocket is officially recommended in all zones except 3H, 4A and 4B.

**Marine** placed fourth in average yield during 1953 and it was also fourth in 1952. This variety requires further testing before official recommendations are made. Marine's early maturity is worthy of consideration where the frost-free season is short.

**3901-D (Raja)** was outyielded by all other varieties on an average basis in 1953. It has been included in Wheat Pool tests for only one year and further testing is required before recommendations can be made. On the basis of tests conducted to date, Raja does not appear to be a high yielding variety. Although Raja matures early, it is questionable whether this feature is of sufficient importance in most areas to compensate for its relatively low yield.

HISTOGRAMS SHOWING FLAX YIELDS BY CEREAL VARIETY ZONES

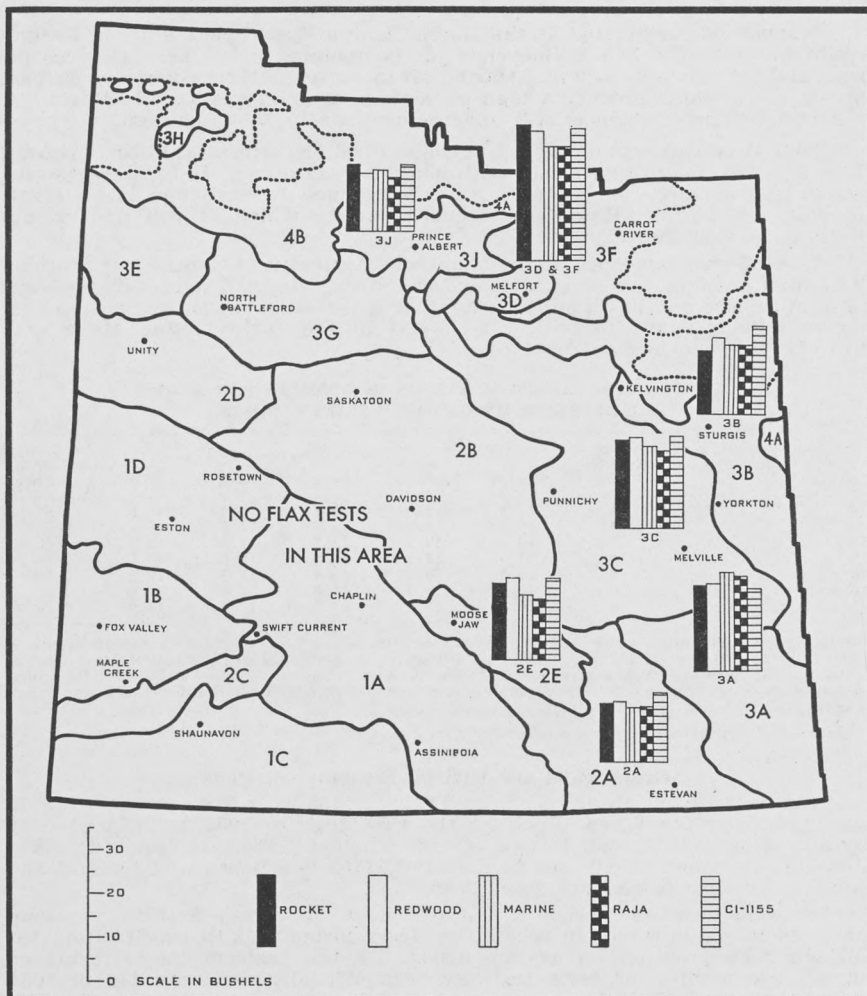


TABLE No. 51—AVERAGE NUMBER OF DAYS FROM SEEDING TO RIPENING  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Rocket	Redwood	Marine	Raja	CI-1155
2A.....	—	—	—	—	—
2E.....	—	—	—	—	—
3A.....	105.7	104.0	103.7	104.3	105.3
3B.....	111.5	112.5	105.0	105.0	116.0
3C.....	113.0	113.5	108.5	109.0	111.0
3D and 3F.....	—	—	—	—	—
3J.....	—	—	—	—	—

Table No. 51. Maturity dates were available from only three zones, but on the basis of this information **Marine** ripened earlier than the other varieties. It was followed closely by **Raja**. The three other varieties all ripened somewhat later.

TABLE No. 52.—AVERAGE HEIGHT OF PLANTS IN INCHES  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone.....	Rocket	Redwood	Marine	Raja	CI-1155
2A.....	—	—	—	—	—
2E.....	—	—	—	—	—
3A.....	26.3	27.0	25.3	25.0	27.0
3B.....	27.5	28.5	25.0	24.0	27.5
3C.....	23.2	23.6	22.0	22.8	24.6
3D and 3F.....	22.0	22.0	21.0	22.0	21.0
3J.....	19.0	19.0	19.0	19.0	20.0

Table No. 52. **Redwood** was taller than the other varieties on an average basis. It was followed closely by **CI-1155** and **Rocket**. **Raja** and **Marine** were generally shorter.

TABLE No. 53.—AVERAGE WEIGHT PER MEASURED BUSHEL  
SUMMARIZED BY CEREAL VARIETY ZONES

Cereal Variety Zone	Rocket	Redwood	Marine	Raja	CI-1155
2A.....	53.5	53.8	54.5	53.3	54.0
2E.....	53.5	54.5	54.5	54.0	55.0
3A.....	53.3	53.0	54.3	53.8	54.5
3B.....	52.4	52.6	54.8	54.0	54.6
3C.....	53.3	54.0	53.9	54.2	53.6
3D and 3F.....	53.0	53.8	54.3	54.3	54.0
3J.....	54.0	54.0	54.0	54.0	54.5

Table No. 53. **CI-1155** was highest in average bushel weight, followed by **Marine, Raja, Redwood** and **Rocket** in that order. None of the varieties were noticeably low in bushel weight.

TABLE No. 54.—COMMERCIAL GRADES IN PERCENTAGE

Variety	1 C.W.	2 C.W.	3 C.W.
Rocket.....	75.9	72.2	6.9
Redwood.....	79.3	6.9	13.8
Marine.....	86.3	10.3	3.4
Raja.....	69.0	24.1	6.9
CI-1155.....	86.2	6.9	6.9

Table No. 54. All varieties were satisfactory in grading ability. **Marine** and **CI-1155** were practically equal, followed by **Redwood**, **Rocket** and **Raja** in that order.

### SUMMARIZATION ACCORDING TO CEREAL VARIETY ZONES

TABLE No. 55.—SUMMARIZED RESULTS FOR ZONE 2A  
(3 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	13.1	13.6	12.2	12.3	15.8
Days from seeding to ripening.....	—	—	—	—	—
Plant height in inches.....	—	—	—	—	—
Bushel weight in pounds.....	53.5	53.8	54.5	53.3	54.0
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	50.0	100.0
2 C.W.....	—	—	—	50.0	—

Necessary difference—2.7 bushels.

Table No. 55. **CI-1155** outyielded the other varieties, the difference being significant in the case of **Marine** and **Raja**.

**Redwood** placed second in yield, followed closely by **Rocket**.

**Raja** and **Marine** were practically equal in yield but **Raja** was slightly lower in bushel weight and grades than the other varieties in this zone.

**Redwood**, **Rocket** and **Victory** are officially recommended in Zone 2A.

**TABLE No. 56.—SUMMARIZED RESULTS FOR ZONE 2E**  
(2 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	17.1	18.9	14.4	13.6	18.4
Days from seeding to ripening.....	—	—	—	—	—
Plant height in inches.....	—	—	—	—	—
Bushel weight in pounds.....	53.5	54.5	54.5	54.0	55.0
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.

Table No. 56. In this zone yield differences were not significant and should not be considered of major importance.

**Redwood** placed first in yield, followed closely by **CI-1155**. **CI-1155** was higher in bushel weight than any other variety in this zone.

**Rocket** placed third in yield. It was low in bushel weight.

**Marine** and **Raja** yielded fourth and fifth respectively. All varieties graded equally well.

**Redwood**, **Rocket** and **Victory** are officially recommended in this zone.

**TABLE No. 57.—SUMMARIZED RESULTS FOR ZONE 3A**  
(3 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	19.1	19.3	22.1	21.2	18.5
Days from seeding to ripening.....	105.7	104.0	103.7	104.3	105.3
Plant height in inches.....	26.3	27.0	25.3	25.0	27.0
Bushel weight in pounds.....	53.3	53.0	54.3	53.8	54.5
Commercial grades in percentage: 1 C.W.....	75.0	75.0	100.0	75.0	100.0
2 C.W.....	25.0	25.0	—	25.0	—

No significant grain yield difference between varieties.

Table No. 57. **Marine** placed first in yield, although it should be noted that the yield differences were not statistically significant. **Marine** was earlier than the other varieties and was exceeded in bushel weight only by **CI-1155**.

**Raja** placed second in yield in this zone.

**Redwood** and **Rocket** were practically equal in yield, bushel weight and grading ability.

**CI-1155** was lowest in yield in this zone but was high in bushel weight and graded well.

**Redwood**, **Rocket** and **Victory** are officially recommended in this zone.

**TABLE No. 58.—SUMMARIZED RESULTS FOR ZONE 3B**  
(4 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	14.1	17.1	15.6	15.6	19.9
Days from seeding to ripening.....	111.5	112.5	105.0	105.0	116.0
Plant height in inches.....	27.5	28.5	25.0	24.0	27.5
Bushel weight in pounds.....	52.4	52.6	54.8	54.0	54.6
Commercial grades in percentage: 1 C.W.....	40.0	60.0	60.0	20.0	60.0
2 C.W.....	60.0	—	40.0	80.0	40.0
3 C.W.....	—	40.0	—	—	—

Necessary difference—2.9 bushels.

Table No. 58. **CI-1155** was high in yield, exceeding all varieties except **Redwood** significantly. It ripened later than the other varieties.

**Redwood** placed second in yield. It was relatively low in bushel weight and grading ability.

**Marine** and **Raja** yielded equally well and both matured early. **Marine** was superior in bushel weight, and graded better than **Raja**.

**Rocket** was outyielded by all other varieties and had low bushel weight.

The varieties officially recommended for this zone are **Rocket**, **Victory** and **Redwing** (where an early variety is needed).

**TABLE No. 59.—SUMMARIZED RESULTS FOR ZONE 3C**  
(6 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	19.8	20.3	18.4	17.3	20.8
Days from seeding to ripening.....	113.0	113.5	108.5	109.0	111.0
Plant height in inches.....	23.2	23.6	22.0	22.8	24.6
Bushel weight in pounds.....	53.3	54.0	53.9	54.2	53.6
Commercial grades in percentage: 1 C.W.....	57.2	57.2	71.4	71.4	71.4
2 C.W.....	14.3	14.3	14.3	—	—
3 C.W.....	28.5	28.5	14.3	28.6	28.6

Necessary difference—2.1 bushels.

Table No. 59. **CI-1155** outyielded the other varieties, exceeding **Marine** and **Raja** significantly. It was taller than the other varieties and was mid-late in maturity.

**Redwood** placed second in yield, exceeding **Raja** significantly. It was late in maturity.

**Rocket** was third in yield, although the differences in general performance between this variety, **CI-1155** and **Redwood** were very slight. **Rocket** ripened relatively late and was slightly lower than the other varieties in bushel weight.

**Marine** was fourth in yield. It ripened early, had good bushel weight and graded well. It was shorter than the other varieties.

**Raja** was outyielded by all other varieties tested. It was high in bushel weight, and ripened relatively early.

The varieties officially recommended for this zone are **Redwood**, **Rocket**, **Victory** and **Redwing** (where an early variety is needed).

**TABLE No. 60.—SUMMARIZED RESULTS FOR ZONE GROUP 3D AND 3F**  
(4 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	30.6	29.3	25.6	25.6	29.9
Days from seeding to ripening.....	—	—	—	—	—
Plant height in inches.....	22.0	22.0	21.0	22.0	21.0
Bushel weight in pounds.....	53.0	53.8	54.3	54.3	54.0
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

Necessary difference—3.3 bushels.

Table No. 60. **Rocket** outyielded the other varieties in this zone, the differences being significant in the case of **Marine** and **Raja**. **Rocket** was slightly low in bushel weight, although not sufficiently low to affect the grading ability of the variety.

**CI-1155** placed second in yield, followed closely by **Redwood**.

Generally, there was little difference in the performance of the three highest yielding varieties. All three outyielded **Marine** and **Raja** significantly. These two varieties were equal in yield, bushel weight and grades.

The recommended varieties for these zones are: Zone 3D, **Rocket** and **Redwing** (for early maturity); Zone 3F, **Rocket**, **Victory** and **Redwing** (for early maturity).

**TABLE No. 61.—SUMMARIZED RESULTS FOR ZONE 3J**  
(2 satisfactory tests)

	Rocket	Redwood	Marine	Raja	CI-1155
Yield in bushels per acre.....	14.8	12.8	13.5	11.8	14.9
Days from seeding to ripening.....	—	—	—	—	—
Plant height in inches.....	19.0	19.0	19.0	19.0	20.0
Bushel weight in pounds.....	54.0	54.0	54.0	54.0	54.5
Commercial grades in percentage: 1 C.W.....	100.0	100.0	100.0	100.0	100.0

No significant grain yield difference between varieties.

Table No. 61. Only two satisfactory tests were conducted in this zone and the data obtained cannot be considered adequate for complete coverage of the area. The differences in yield were not significant, and differences in other characteristics were of a minor nature.

**CI-1155** and **Rocket** were practically equal in yield. CI-1155 was slightly taller and had slightly higher bushel weight than the other varieties. All varieties graded well.

The varieties officially recommended for this zone are Redwood, Rocket, Victory and Redwing (where early maturity is needed).

#### CEREAL VARIETY ZONE 4B

The only flax test conducted in Zone 4B was badly damaged by frost. The results of this test will be found in the table "Individual Summarized Results of All Tests—Flax" under District 15, Sub-district 7, conducted by L. Philippe Jean of Debden.



Erick and Arthur Heschel of Calderbank with their variety test sign.



Table No. 62

## Individual Summarized Results of All Tests—Flax

Important—It should be kept in mind that the results of a single test should not be used as the basis for the choice of a variety. A more reliable guide is the yield performance discussion in the summarization according to Cereal Variety Zones, which is based on a large number of tests conducted over a period of years.

## WHEAT POOL DISTRICT 1

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bushels per acre	Days seeding to ripening	Plant height in inches	Pounds per measured bushel	Commercial grades	Grading remarks
<b>EDDIE R. NIELSEN, REDVERS</b>										
3A.....	1	2	B	Rocket.....	18.7	110	30	53	1 C.W.	—
				Redwood.....	20.7	109	29	53	1 C.W.	—
				Marine.....	19.1	109	30	54	1 C.W.	—
				Raja.....	20.5	110	27	54	1 C.W.	—
				CL-1155.....	16.6	109	30	54	1 C.W.	—
Necessary difference—2.0 bushels.										
<b>HERBERT A. HAWKER, GLEN EWEN</b>										
3A.....	1	3	B	Rocket.....	16.7	—	—	54	1 C.W.	—
				Redwood.....	14.2	—	—	53	1 C.W.	—
				Marine.....	20.0	—	—	55	1 C.W.	—
				Raja.....	18.1	—	—	54	1 C.W.	—
				CL-1155.....	17.9	—	—	55	1 C.W.	—
No significant grain yield difference between varieties.										
<b>RONALD R. KLATT, BENSON</b>										
2A.....	1	5	B	Rocket.....	17.1	—	—	54	1 C.W.	—
				Redwood.....	19.2	—	—	54	1 C.W.	—
				Marine.....	16.6	—	—	54	1 C.W.	—
				Raja.....	17.2	—	—	53	2 C.W.	—
				CL-1155.....	24.2	—	—	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>GEORGE R. KUCHINKA JR., MACOUN</b>										
2A.....	1	6	C	Rocket.....	20.9	—	—	54	1 C.W.	—
				Redwood.....	18.2	—	—	54	1 C.W.	—
				Marine.....	12.6	—	—	55	1 C.W.	—
				Raja.....	8.5	—	—	52	2 C.W.	G.
				CL-1155.....	21.3	—	—	55	1 C.W.	—
Test damaged—Yields not used in zone summary.										
<b>BILLY JOBLONSKI, HUME</b>										
2A.....	1	8	C	Rocket.....	15.0	—	—	52	1 C.W.	—
				Redwood.....	17.0	—	—	53	1 C.W.	—
				Marine.....	14.2	—	—	54	1 C.W.	—
				Raja.....	14.1	—	—	54	1 C.W.	—
				CL-1155.....	17.4	—	—	54	1 C.W.	—
Necessary difference—2.0 bushels.										
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>										
3A.....	1	10	B	Robert B. Doty, Carlyle.						

## WHEAT POOL DISTRICT 6

<b>GABRIEL DREHER, TYVAN</b>										
2A.....	6	1	B	Rocket.....	7.2	—	—	54	1 C.W.	—
				Redwood.....	4.7	—	—	54	1 C.W.	—
				Marine.....	5.9	—	—	55	1 C.W.	—
				Raja.....	5.7	—	—	54	1 C.W.	—
				CL-1155.....	5.9	—	—	53	1 C.W.	—
Necessary difference—1.1 bushels.										
<b>GORDON L. O'BYRNE, WILCOX</b>										
2E.....	6	3	B	Rocket.....	14.7	—	—	53	1 C.W.	—
				Redwood.....	14.7	—	—	54	1 C.W.	—
				Marine.....	11.7	—	—	54	1 C.W.	—
				Raja.....	10.6	—	—	54	1 C.W.	—
				CL-1155.....	14.3	—	—	54	1 C.W.	—
Necessary difference—1.4 bushels.										
<b>EARL W. PERKIN, ROULEAU</b>										
2E.....	6	6	B	Rocket.....	19.4	—	—	54	1 C.W.	—
				Redwood.....	23.1	—	—	55	1 C.W.	—
				Marine.....	17.0	—	—	55	1 C.W.	—
				Raja.....	16.5	—	—	54	1 C.W.	—
				CL-1155.....	22.4	—	—	56	1 C.W.	—
Necessary difference—2.7 bushels.										

# WHEAT POOL DISTRICT 7

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bushels per acre	Days seeding to ripening	Plant height in inches	Pounds per measured bushel	Commercial grades	Grading remarks
<b>JAMES E. BROWNLEE, WAWOTA</b>										
3A.....	7	3	C	Rocket.....	15.5	115	20	52	2 C.W.	G.
				Redwood.....	19.7	112	21	52	2 C.W.	G.
				Marine.....	14.4	113	18	53	1 C.W.	—
				Raja.....	9.5	113	19	52	2 C.W.	G.
				CI-1155.....	19.0	115	21	54	1 C.W.	—
Part of test damaged by flooding—Yields not used in zone summary.										
<b>BILLIE LARTER, BROADVIEW</b>										
3A.....	7	7	B	Rocket.....	21.9	92	29	54	1 C.W.	—
				Redwood.....	22.9	91	31	54	1 C.W.	—
				Marine.....	27.2	89	28	55	1 C.W.	—
				Raja.....	24.9	90	29	55	1 C.W.	—
				CI-1155.....	21.0	92	30	55	1 C.W.	—
No significant grain yield difference between varieties.										
<b>ALBERT A. PETRACEK, LANGENBURG</b>										
3B.....	7	9	B	Rocket.....	26.3	113	27	54	1 C.W.	—
				Redwood.....	29.5	115	27	55	1 C.W.	—
				Marine.....	21.6	108	24	55	1 C.W.	—
				Raja.....	2.6	104	22	53	2 C.W.	G.
				CI-1155.....	24.7	113	27	55	1 C.W.	—
Test damaged by birds—Yields not used in zone summary.										

# WHEAT POOL DISTRICT 8

<b>FLORANCE M. LEGGE, SALTCOATS</b>										
3B.....	8	2	C	Rocket.....	16.1	110	28	55	1 C.W.	—
				Redwood.....	20.4	110	30	55	1 C.W.	—
				Marine.....	13.6	102	26	56	1 C.W.	—
				Raja.....	16.1	106	26	56	1 C.W.	—
				CI-1155.....	19.3	119	28	56	1 C.W.	—
Necessary difference—2.5 bushels.										
<b>GERALD R. KOWAL, WILLOWBROOK</b>										
3C.....	8	4	C	Rocket.....	11.6	—	28	53	2 C.W.	G.
				Redwood.....	12.2	—	28	54	2 C.W.	G.
				Marine.....	10.7	—	25	54	1 C.W.	—
				Raja.....	11.7	—	28	54	1 C.W.	—
				CI-1155.....	13.9	—	29	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>WAYNE G. LOWE, HINCHLIFFE</b>										
3B.....	8	8	B	Rocket.....	7.7	—	—	51	2 C.W.	G.
				Redwood.....	9.2	—	—	50	3 C.W.	F.
				Marine.....	13.3	—	—	55	2 C.W.	G.
				Raja.....	8.7	—	—	54	2 C.W.	G.
				CI-1155.....	16.4	—	—	54	2 C.W.	G.
Necessary difference—4.1 bushels.										
<b>OPHELIA OCHITWA, NORQUAY</b>										
3B.....	8	9	C	Rocket.....	23.1	—	—	51	2 C.W.	G.
				Redwood.....	27.5	—	—	52	1 C.W.	—
				Marine.....	24.2	—	—	54	1 C.W.	—
				Raja.....	22.6	—	—	53	2 C.W.	G.
				CI-1155.....	29.3	—	—	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>ALLAN A. LISTER, PELLY</b>										
3B.....	8	10	B	Rocket.....	9.3	—	—	51	2 C.W.	F.
				Redwood.....	11.4	—	—	51	3 C.W.	G., F.
				Marine.....	11.1	—	—	54	2 C.W.	F.
				Raja.....	15.0	—	—	54	2 C.W.	F.
				CI-1155.....	14.5	—	—	54	2 C.W.	F.
Necessary difference—3.0 bushels.										

Tests discarded on account of damage by flooding, pests, hail, drought or other causes

3B.....	8	1	C	Bill Malainy, Wroxton.
3B.....	8	5	C	Ted Penniston, Togo.

# WHEAT POOL DISTRICT 9

<b>CLIFFORD N. LARSON, KELLIHER</b>										
3C.....	9	1	C	Rocket.....	25.0	—	24	54	1 C.W.	—
				Redwood.....	26.4	—	26	55	1 C.W.	—
				Marine.....	20.1	—	23	55	1 C.W.	—
				Raja.....	20.1	—	23	55	1 C.W.	—
				CI-1155.....	27.3	—	26	55	1 C.W.	—
Necessary difference—4.0 bushels.										

### Wheat Pool District 9—Continued

Cereal Variety Zone	Dist.	Sub- Dist.	Test desig- nation	Varieties	Yield bushels per acre	Days seeding to ripening	Plant height in inches	Pounds per measured bushe <sup>1</sup>	Com- mercial grades	Grading remarks
<b>DONALD F. SCHUSTER, MARKINCH</b>										
3C.....	9	2	C	Rocket.....	15.0	109	25	54	1 C.W.	—
				Redwood.....	15.2	109	24	54	1 C.W.	—
				Marine.....	17.1	102	22	52	1 C.W.	—
				Raja.....	14.4	104	23	54	1 C.W.	—
				CI-1155.....	17.2	109	25	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>RAYMOND E. COCKWILL, KELLIHER</b>										
3C.....	9	3	C	Rocket.....	24.9	—	—	54	1 C.W.	—
				Redwood.....	22.6	—	—	54	1 C.W.	—
				Marine.....	23.1	—	—	55	1 C.W.	—
				Raja.....	20.6	—	—	54	1 C.W.	—
				CI-1155.....	26.4	—	—	54	1 C.W.	—
Necessary difference—2.7 bushels.										
<b>REINHOLD R. WODTKE, PUNNICHY</b>										
3C.....	9	7	B	Rocket.....	18.5	—	—	53	3 C.W.	F.
				Redwood.....	22.7	—	—	55	3 C.W.	F.
				Marine.....	20.9	—	—	54	3 C.W.	F.
				Raja.....	18.5	—	—	54	3 C.W.	F.
				CI-1155.....	16.3	—	—	53	3 C.W.	F.
No significant grain yield difference between varieties.										

### WHEAT POOL DISTRICT 13

<b>ALVIN J. HESSDORFER, ST. BENEDICT</b>										
3C.....	13	10	B	Rocket.....	23.6	117	—	54	1 C.W.	—
				Redwood.....	22.8	118	21	55	1 C.W.	—
				Marine.....	18.4	115	20	55	1 C.W.	—
				Raja.....	18.5	114	19	56	1 C.W.	—
				CI-1155.....	23.9	113	22	54	1 C.W.	—
Necessary difference—2.6 bushels.										
Tests discarded on account of damage by flooding, pests, hail, drought or other causes										
3C.....	13	11	B	Robert D. Bruning, Muenster.						

### WHEAT POOL DISTRICT 14

<b>NORBERT SCHMOKER, PERIGORD</b>										
3C.....	14	5	C	Rocket.....	—	—	20	51	3 C.W.	F., G.
				Redwood.....	—	—	19	51	3 C.W.	F., G.
				Marine.....	—	—	20	52	2 C.W.	F.
				Raja.....	—	—	21	52	3 C.W.	F., G.
				CI-1155.....	—	—	21	51	3 C.W.	F., G.
Test frozen—Yields not used in zone summary.										
<b>MORRIS ZWOZDESKY, AYLSHAM</b>										
3F.....	14	10	B	Rocket.....	26.6	—	22	54	1 C.W.	—
				Redwood.....	25.1	—	22	54	1 C.W.	—
				Marine.....	19.5	—	21	55	1 C.W.	—
				Raja.....	21.2	—	22	54	1 C.W.	—
				CI-1155.....	24.7	—	21	54	1 C.W.	—
Necessary difference—1.9 bushels.										
<b>WILLIAM F. PERKINS, CODETTE</b>										
3F.....	14	11	C	Rocket.....	31.4	—	—	53	1 C.W.	—
				Redwood.....	29.4	—	—	54	1 C.W.	—
				Marine.....	19.5	—	—	54	1 C.W.	—
				Raja.....	21.6	—	—	55	1 C.W.	—
				CI-1155.....	28.7	—	—	54	1 C.W.	—
Necessary difference—3.8 bushels.										

### WHEAT POOL DISTRICT 15

<b>ELEANOR I. RINDAL, DOMREMY</b>										
3J.....	15	2	C	Rocket.....	20.6	—	19	54	1 C.W.	—
				Redwood.....	19.9	—	19	54	1 C.W.	—
				Marine.....	20.4	—	19	54	1 C.W.	—
				Raja.....	18.5	—	19	55	1 C.W.	—
				CI-1155.....	21.4	—	20	55	1 C.W.	—
No significant grain yield difference between varieties.										

# Wheat Pool District 15—Continued

Cereal Variety Zone	Dist.	Sub-Dist.	Test designation	Varieties	Yield bushels per acre	Days seeding to ripening	Plant height in inches	Pounds per measured bushel	Com-mercial grades	Grading remarks
<b>LOUIS LARSON, HAGEN</b>										
3D.....	15	2	D	Rocket.....	31.6	—	—	52	1 C.W.	—
				Redwood.....	27.1	—	—	53	1 C.W.	—
				Marine.....	30.4	—	—	54	1 C.W.	—
				Raja.....	28.3	—	—	54	1 C.W.	—
				CI-1155.....	32.9	—	—	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>L. PHILIPPE JEAN, DEBDEN</b>										
4B.....	15	7	B	Rocket.....	5.4	—	15	52	1 C.W.	—
				Redwood.....	7.9	—	18	53	1 C.W.	—
				Marine.....	5.5	—	16	53	1 C.W.	—
				Raja.....	4.7	—	17	52	1 C.W.	—
				CI-1155.....	7.6	—	17	55	1 C.W.	—
Test damaged by frost—Yields not used in zone summary.										
<b>DAVID A. SIMPSON, SHELLBROOK</b>										
3J.....	15	8	C	Rocket.....	9.0	—	—	54	1 C.W.	—
				Redwood.....	5.6	—	—	54	1 C.W.	—
				Marine.....	6.5	—	—	54	1 C.W.	—
				Raja.....	5.1	—	—	53	1 C.W.	—
				CI-1155.....	8.0	—	—	54	1 C.W.	—
Necessary difference—1.9 bushels.										
<b>ERNEST N. CARLSON, CHOICELAND</b>										
3F.....	15	11	B	Rocket.....	32.6	—	—	53	1 C.W.	—
				Redwood.....	35.4	—	—	54	1 C.W.	—
				Marine.....	32.9	—	—	54	1 C.W.	—
				Raja.....	31.4	—	—	54	1 C.W.	—
				CI-1155.....	33.3	—	—	54	1 C.W.	—
No significant grain yield difference between varieties.										
<b>Tests discarded on account of damage by flooding, pests, hail, drought or other causes</b>										
3B.....	15	9	C	Elmer Paczay, Paddockwood.						

## CONCLUSIONS

The 1953 Saskatchewan wheat crop has been officially estimated at 375,000,000 bushels, or 23.3 bushels per seeded acre. This is far above the long-term average yield for the province, and reflects the excellent growing and harvest conditions which prevailed in most areas.

Despite these excellent general conditions, there were certain areas where serious crop damage resulted from a variety of factors. In the spring many districts were seriously affected by flooding. Later on, part of the north-central and northwestern area experienced damage by drought. Stem rust took a heavy toll in the southeast, and hail and sawflies reduced crop yields in some districts.

These local variations indicate the importance of studying the results of a number of tests in a particular zone, rather than accepting the results of only one test. For similar reasons it is important to consider the performance of a variety over a number of years because of the variation in conditions from year to year.

One of the most outstanding features of the 1953 wheat tests was the excellent performance of Selkirk, the new rust-resistant variety licensed in December, 1953. In areas where stem rust race 15B was severe, all of the standard varieties were damaged, but Selkirk escaped without injury and consequently outyielded the other varieties by a considerable margin. Selkirk also compared favorably with the other varieties in most areas where stem rust was not a factor. It will be tested further in these areas. Over much of the province Thatcher maintained its long-standing record of superiority, and is still highly recommended. Lee has now been tested for a number of years, and although it has been outyielded by Thatcher in most zones, its performance in the eastern and southeastern areas of Saskatchewan has been good. The new sawfly-resistant variety Chinook yielded well, and is now recommended for much of the central and southwestern area of the province.

The new feed barley, Husky, originated at the University of Saskatchewan, repeated its good performance of previous years, particularly in the north and northeast. Balder, a new two-rowed variety which has not yet been licensed, outyielded Hannchen in most zones of the north and northeast, and further tests should be conducted.

Redwood and Rocket flax gave good results, but both were outyielded in 1953 by a new, unlicensed variety known as CI-1155. Marine and Raja, although early in maturity, were generally lower in yield than the other varieties tested.

Generally, the 1953 variety testing program has been highly successful. To a considerable extent this success has been due to the enthusiastic and willing co-operation of the young farm men and women who supervised the individual tests. The distribution of more than 300 tests throughout all parts of the province is a highly valuable feature of this project. This distribution could not be achieved without the active support and assistance of our variety test supervisors.

Each year these tests provide valuable scientific information regarding the performance of new grain varieties, but they also serve another useful purpose. During the growing season each test serves as a constant reminder to farmers in the district where it is conducted of the differences between varieties and the importance of choosing the most suitable varieties available.



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